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ABSTRACT

This study attempts to determine relationships among the understanding of English syntactic patterns, reading achievement and grade point average among students at Bronx Community College (New York). The students used in the study were 124 entering freshmen who scored below 60 on the Nelson-Denny Reading Test, and who were enrolled in the reading and study skills laboratory course. A Test of Sentence Meaning was given to evaluate student knowledge of English syntax. Lectures, classroom procedures, course outlines and requirements, and grading procedures were the same for all students, but an experimental group received class exercises and individual assignments emphasizing English syntax. Findings after one semester of instruction showed that there was: (1) a high correlation between Nelson-Denny Reading Test scores and knowledge of the English syntax; (2) a significant relationship between directed instruction in English syntax and students' reading achievement; and (3) no significant differences in grade point averages between the control and experimental groups. (RN)

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FINAL REPORT

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INSTRUCTION IN ENGLISH SYNTAX AS RELATED  
TO ACHIEVEMENT OF COMMUNITY COLLEGE STUDENTS

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## ABSTRACT

### Purpose

This study investigated the effectiveness of directed instruction in English syntax in the improvement of the reading achievement scores and the grade point average of community college students.

### Methodology

The subjects were 124 entering freshmen who had earned total raw scores below 60 on The Nelson-Denny Reading Test. Knowledge of English syntax was evaluated by A Test of Sentence Meaning. The experimental group received directed instruction in English syntax. The control group received the same course requirements.

### Results

1. A high positive correlation was found between knowledge of English syntax and achievement on The Nelson-Denny Reading Test.
2. Directed instruction in English syntax indicated a significant, positive relationship to the reading achievement of the students on total score and vocabulary. A positive but not statistically significant relationship was found on the comprehension variable.
3. There were no significant differences found between the experimental and the control group on grade point average, although the experimental group indicated higher mean scores.

### Conclusions

1. Knowledge of English syntax is related to the reading achievement scores of community college students.
2. Directed instruction in English syntax may facilitate reading achievement.
3. Directed instruction in English syntax does not indicate a significant relationship to grade point average.

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## INTRODUCTION

### Background for the Study

For many Americans who have never aspired to a college education, the community college presents an opportunity to fulfill the American aspiration that education, and as much of it as possible, be open to all citizens. Three decades ago, high school was the final formal educational experience for most citizens. Now the community college, publicly supported, offers another level in American formal education. Totten (1970) has stated that in more than 250 communities in the United States where community education has been implemented, some gains in social improvement are observable. He evaluates community education as having the potential to influence the coordination of all educative forces in the community for solving human problems.

The City University of New York, with its commitment to open admissions, has made available a college education to all high school graduates who seek it, regardless of previous academic achievement. Meister describes the new college population as students whose abilities, aims and backgrounds are unlike those of previous generations. "...unprecedented numbers of high school students now seeking college admission have suffered the debilitating effects of social and economic distress in home, neighborhood and social facilities. Many of these victims of "cultural deprivation" are concentrated in particular ethnic groups whose members are, in increasing numbers, now seeking to scale the upper rungs of the educational ladder," (1962, p. 79).

The entering freshmen present their teachers with an extraordinary range of intellectual ability and cultural background. Garrison reports that, "Many of them are functionally illiterate---or close to it. Some of them are very bright indeed but have never worked even close to their potential. At least half of the students at any given junior college need some sort of remedial work, either in reading and writing or in mathematics and science," (1968, p. 10). Garrison's findings are supported by Bossone's (1970) in the community colleges of The City University of New York. At Bronx Community College, fifty percent of the entering freshman class of September, 1970, under open admissions, was found to be below minimal reading ability level for college success, and therefore in need of supportive instruction in reading, (Simon, 1970).

An extensive exploration of the research in college reading finds that researchers and studies have been con-



cerned with varying instructional time periods, testing commercially published reading materials, and measuring attitudes of students toward reading. The evaluative measures have generally been standardized reading tests. Some studies have explored grade-point averages of students who have had laboratory instruction and those who have not. None of the studies has sought to explore the growing concern that the lack of comprehension of language may be a major barrier for the individual in his learning to read.

The recent theoretical developments in linguistics and reading have renewed interest in the way meaning is derived from spoken and written language. Both linguists and reading specialists have emphasized the importance of the sentence as the basic meaning bearing unit in English. None of the research in college reading has sought to explore this relationship.

Briggs has written that, "The primary purpose in reading is to extract 'meaning' from written language. 'Meaning' is both semantic meaning (that is, recognizing the idea for which a word is the symbol) and total meaning that recreates as nearly as possible the exact concept which the author intended as he wrote. Between this 'getting the gist' and communication there exists a third ingredient---structure in language. ...there does not appear to be in print a discussion which brings together ideas about the patterns of the language and the application of these patterns to improved reading," (1967, p. 225).

Faculty and administration have generally assumed that the evaluation of a student's reading ability as measured by a standardized reading test is a good predictor of his potential achievement in college coursework. These tests have not attempted to measure a student's literal understanding of sentences which are the basis of paragraph development. The specific language abilities of the student, the level of facility necessary to achieve high scores on a reading test, and the relationship among these factors to college success have yet to be explored. Would a diagnosis of and instruction in language structure increase reading ability, and indicate transfer to college coursework in an improved grade point average? These are the questions this study seeks to answer.

The ability to read is critical to the student's successful mastery of the college curriculum. However, the process of learning must be understood before effective teaching can take place. Underlying the individual's ability to interpret the visual symbols for language is his verbal ability. As Church has stated, "...those whose verbal resources

are limited are at a disadvantage in symbolic problem solving," (1965, p. 157).

Goodman describes the psychological process involved in reading. "To reconstruct the message, the reader must decode from language. This means that he must know and use the language in pretty much the same way that the writer knows and uses it. It also means that he must have sufficient experience and conceptual development so that the message will be comprehensible to him," (1966, p. 188).

For individuals who indicate reading deficiency, an effective reading program must be concerned with much more than "skill building." It is not enough to direct the student to workbook exercises. Effective teaching must be based on the elements of language which convey meaning. It is hypothesized that once a student gains the ability to recognize the significance of the language structure in printed material, and then fills the structure with the ideas of the words present, this ability will be transferred to the reading involved in the subject areas of which the college curriculum is composed.

This proposed exploration into the learning process underlying reading instruction has widespread implications for the improvement of pedagogic methodology not only in the rapidly multiplying community colleges throughout the nation, but indeed for the many publicly supported programs at all educational levels.

### Problem

#### General Statement of the Problem

What are the relationships among the understanding of English syntactic patterns, reading achievement and grade point average among community college students?

#### Specific Problems

1. Are the reading achievement scores of community college students related to an understanding of English syntactic patterns?
2. Will directed instruction in English syntactic patterns indicate a significant positive relationship to grade point average?

### Hypotheses

It was hypothesized that:

1. The reading achievement scores of community college students would indicate a significant positive relationship to the students' understanding of English syntactic patterns as measured by A Test of Sentence Meaning. The students who earned higher scores on reading achievement would indicate better understanding of English syntactic patterns than the students who earned lower scores.
2. There would be a significant positive relationship between directed instruction in English syntactic patterns and reading achievement scores. Students who received directed instruction in English syntactic patterns would achieve higher reading scores than students who did not receive directed instruction in English syntactic patterns.
3. There would be a significant positive relationship between directed instruction in English syntactic patterns and grade point average of students. Students who received directed instruction in English syntactic patterns would achieve higher grade point averages than students who did not receive directed instruction in English syntactic patterns.

### Theoretical Rationale

The Substrata-Factor Theory of Reading by Jack Holmes provides a rationale for the relationship between language and the acquisition of reading skills. It also provides an explanation of language differences observed among individuals, and holds promise as a theory which may provide the basis for the improvement of pedagogy in the teaching of reading. It is this theory which provides the theoretical rationale for this study.

Holmes proposes:

In essence, the Substrata-Factor Theory holds that normally, reading is an audio-visual verbal-processing skill of symbolic reasoning sustained by the inter-facilitations of an intricate hierarchy of substrata factors that have been mobilized as a neurological working-system and pressed into service in accordance with the purposes of the reader (1970, pp. 187-188).

### The Substrata Factors

The substrata factors are thought of by Holmes as the neurological subsystems of brain assemblies which contain various kinds of information such as memories for shapes, sounds and meanings of words and word parts, as well as memories for vicarious and experiential material, conceptualizations and meaningful relationships. These are stored as verbal units in phrases, idioms, sentences, etc. Different subsets of information, learned under different circumstances at different times, and therefore, stored in different parts of the brain are brought simultaneously into awareness when triggered by appropriate symbols on the printed page. These substrata factors are tied together in a working-system, and as the interfacilitation in the working-system increases, the efficiency of the individual's reading increases. Diverse substrata factors initially become associated together in a particular working-system by the psychocatalytic action of what the theory hypothesizes as mobilizers.

### The Mobilizers

These are defined as deep-seated value systems, the fundamental ideas that the individual holds of himself, and his developing relationship to his environment. With or without conscious awareness, the mobilizers function to select from one's repertoire of subabilities those which will maximize one's chances of solving a specific problem and forwarding the realization of self-fulfillment in general. They are the driving value systems from which spring the many and specific attitudes and anxieties a person holds. Holmes thinks of these mobilizers as the controlling influences which govern what shall be selected and tied into a particular neural pattern of communication.

### Individual Differences

An individual will solve the same problem at different times in his life using different working-systems. Different individuals may perform the same task with an equal degree of success by drawing upon different sets of subabilities.

As the individual increases his proficiency over a succession of newly learned subskills, the substrata factor patterns which underlie his ability to read will also change. Holmes proposes that this reorganization in the structure of the hierarchy will reflect the impact of the interaction of the psychoeducational factors of learning, the biochemical and neurophysical factors of growth and development, the sequential organization of the material studied, and the method by which the individual was taught. Two persons may read quite differently, not only because one individual

has more or better information, but because one has a working-system which is superior to that of the other.

What an individual knows depends upon the repertoire of information stored in his cell assemblies; but how he thinks, how he reasons with what he knows, depends first upon the nature and number of his genetically determined neuro-configurations and second, upon the nature of the functional-configurations or working-systems into which he can efficiently organize his mental repertoire of information.

Holmes summarizes that individual differences in the ability to reason about what is being read (that is, to mentally manipulate the inflow of new ideas so that they bear a meaningful relationship to what one has already learned) depends not only on the essential nature of the stored information, but more importantly upon the associative logic of the conceptualizing activity-of-perception stimulated within the brain, by the meaningfulness of the sequential input at the time of presentation and reception.

Both linguists and reading specialists emphasize the importance of the sentence as the basic unit of meaning in English. Yet, standardized silent reading tests which are used to evaluate a student's abilities, have not attempted to directly measure a student's literal comprehension of sentences, which is the basis of paragraph development. Although the reading grade obtained from the test results can be a valuable tool for evaluating a student's general competence in reading, this grade level score does not indicate weaknesses in specific language comprehension areas.

Whitehall and Allen (1956) have suggested that although written English is closely related to its spoken counterpart, the written form is a separate system of English. Those syntactic features common to spoken English and formal written English that the student already knows should not create reading difficulties for him, but those syntactic features of formal written English which are unfamiliar to the student may create reading comprehension difficulties.

If a teacher were to diagnose those elements of syntax within formal written English that a student does not understand, teach those elements so that the "input" is meaningful at the time of presentation and reception, it was reasoned, that instruction would be much more effective and indicate transferability to other areas of the curriculum.

### Limitations of the Study

1. This study was limited to students at Bronx Community College enrolled in sections of the course entitled, Reading and Study Skills Laboratory of the principal investigator.
2. Only entering students who had earned a raw score below 60 on the Nelson-Denny Reading Test were subjects of the study.
3. The instructional period was limited to one semester of forty-five hours.

### Review of the Literature and Related Research

The review of the literature and related research is presented within the following categories:

A Description of the Junior College and the Junior  
College Student  
Research in Junior College Reading Programs  
Linguistic and Reading Theory

#### A Description of the Junior College and the Junior College Student

The two-year college fills many needs which are not met by four-year schools. The special occupational curricula, adult education and a two-year general education desired by students who do not seek a bachelor's degree are reported by The American College Testing Program as some of the needs served (1969). Throughout the literature, optimistic enthusiasm for the two-year college as an institution which meets a societal need is reported. The Carnegie Commission Report on Higher Education states:

The community college movement is full of promise for the opportunities it offers to young persons and adults to increase their occupational skills, to get started in an academic career, to enrich the quality of their lives, and generally to multiply their educational options and their chances to choose wisely among them. It offers these opportunities to more Americans in more areas and of more ages than any other segment of higher education (1970, p. 73).

It is a rapidly growing educational institution. Medsker and Tillery (1971) write that in the sixties enrollments more than doubled. They projected that enrollment would

probably exceed 4 million by 1980.

Of the students who seek post-secondary education, the junior college student is generally less prepared academically. The report of The American College Testing Program indicates that "...two year colleges attract pragmatic students seeking vocational training; they are less attractive to talented students who are intellectually and academically oriented, who plan a degree in one of the traditional subject areas..." (1969, p. 80). The University Commission on Admission of The City University of New York reports:

Students in the three types of programs -- four-year, transfer, and career -- are almost completely segregated by grade with few exceptions. Students with the highest grades enter the senior colleges as first-choice institutions, the next group enter transfer programs as less-than-satisfactory alternatives to the four-year programs, and students with the lowest grades are assigned to the career programs (1969, p. 11).

The junior college student often encounters difficulty in his attempts to meet the demands of the college curriculum. Garrison finds that half the students entering community colleges need remedial work (1968, p. 10). Bossone confirms these findings in his research study of the reading of community college students in The City University of New York, (1970).

The academic deficiencies may be related to the familial and attitudinal background of the junior college student. Medsker and Tillery describe the student: "...many junior college youths are marginal students, not only because of economic pressures and lack of incentives at home, but because they themselves are not sure they can make it, (1971, p. 83). Many are minority group members (Meister, et. al., 1962) and many are the first in their families to attend college (American College Testing Program, 1969).

The students who entered Bronx Community College under open admissions are described in a current research report. Eagle, et. al. found:

...it is clear that the entering 1970 group, compared to the 1968 group, tends to be older, less well-prepared scholastically, in greater financial need, and of somewhat lower educational aspiration level. There is now, for the first time, a clear majority of Black and Puerto Rican students entering, while the proportion of Jewish students has sharply declined. The family backgrounds of the 1970 students show a slight decline in parental education and income. The new group of students displays an increasing interest

in business careers at the expense of careers in health and technology. (It is not known to what extent differences in sampling between 1968 and 1970 may account for some of the above differences), (1971, pp. 5-6).

For this student, entrance into the community college is hope for improving future prospects by scaling the educational ladder. The literature describing the community college contends that the open admissions policy is a major contribution of the community college to society. According to Gleazer, "If they are successful in the appropriate community college courses, the way is open to the university," (1968, p. 51). The University Commission on Admissions of The City University of New York proposes: "The fact remains that the best way of determining whether a potential student is capable of college work is to admit him to college and evaluate his performance there," (1969, p. 11).

For many of these students the open-door admission may be a revolving door, as Clarke and Ammons (1970) wrote. If, indeed we are to provide equal educational opportunity for these students, "the public community colleges must serve as bridges between high school and career employment for some, and between high school and advanced higher education for others," (Medsker and Tillery, 1971, p. 78).

The needs of the students commit the community colleges to programs of remedial academic assistance. Craig stated the opinion of most writers who deal with the community colleges when she wrote: "For many students, the goal of a college education and proper training for a life's vocation is thwarted or completely unattainable unless the student is provided remedial and personnel services as a supplement to his academic training (1967, p. 195). According to Medsker and Tillery (1971) the efforts to remedy deficiencies cut across all segments of the comprehensive program of the community college.

The open admissions policy of The City University of New York makes the following provisions:

- a. It shall offer admission to some University program to all high school graduates of the City.
- b. It shall provide for remedial and other supportive services for all students requiring them.
- c. It shall maintain and enhance the standards of academic excellence of the colleges of the University. (1969, p. 1)



At Bronx Community College, a part of the City University, the implementation of the open admissions policy brought with it a shift in student characteristics which "...points to increased needs on the part of students in the areas of academic preparation, counselling, and financial assistance," (Eagle, et. al., 1971, pp. 5-6). The researchers proposed "...that unless massive assistance is forthcoming in all of these areas many of the new entering students will not be able to survive the Bronx Community College experience," (Eagle, et. al., 1971, pp. 5-6).

In summary: The research indicates that students who enter community colleges are generally unprepared for the academic demands of college studies. All support the contention that the opportunity afforded the individual to participate in a program of higher education holds great promise not only for the individual but for the community in general. However, for this promise to be fulfilled, provision must be made for remedial support for the student.

#### Research in Junior College Reading

The inadequate academic preparation of the junior college student for college work as evaluated by the student's high school average and standardized test scores have necessitated the provision for remedial and other supportive services. The reading test score is of particular interest to counselors, for college students with low reading scores have been found to earn lower grades and to have a higher dropout rate due to academic failure than able readers, (Craig, 1967, p. 196). In a study which compared the probability of success in college as predicted by a counselor interview and a reading test, Astor (1968) concluded that a good reading test is probably a more accurate predictor of future college success than the counseling interview. Several studies reviewed by Bliesmer (1969) support these findings.

The poor college reader is described as deficient in intelligence, reading vocabulary and word attack skills (Hill, 1960). LeFevre (1971) referred to students in public two-year colleges whose "spoken language is remarkably lacking in subordination of any kind; their written language frequently resembles, in structure, the language described by Dr. Ruth Strickland in her study of first-graders." Junior college retarded readers do not use context to gain meaning, according to Sears (1971). Researchers hypothesize that the reading difficulty may be symptomatic of one or a combination of causes such as lack of experiential background associated with socio-economic disadvantage, perceptual difficulties and/or poor teaching. Hill (1960) proposed that programs should determine the needs of the student, set objectives, and plan to meet the objectives.

College programs which were designed to make college freshmen more effective in their studies came into being in the late forties and fifties to lend academic support to the college careers of returning servicemen (McConihe, 1967). According to Medsker and Tillery, "There is little doubt that well-conducted reading programs are bringing many students up to reasonable standards in reading speed, comprehension, and vocabulary (1971, p. 65). However, Medsker and Tillery do not define what they mean by "reasonable standards." A study of the research conducted among college freshmen in reading, and the description of college remedial reading programs described in the literature, reveal differences in diagnostic procedure, methods implemented, materials employed and evaluative criteria.

In an attempt to improve the visual perception of 190 college students enrolled in reading courses at Purdue University, Schmidt (1966) gave them practice designed to improve eye movements. The students did improve in eye movements but not in comprehension, as measured by exercises constructed by the investigators from college textual materials.

Research comparing the effectiveness of various methods is reported by many investigators. Phillips (1971) studied the effect of four different pedagogical procedures (teacher guided, individualized, audio-visual, control-no instruction) on the study skills and attitudes of 102 freshmen enrolled in 14 sections of a reading and study skills course at a university enrolling disadvantaged Black students. His criterion was The Brown-Holtzman Survey of Study Skills and Attitudes. The results are reported as uneven, although the individualized group showed consistent losses. Johnson (1968) tested two methods, machine-assisted and non-machine-assisted with 60 adults in an adult reading improvement course. The criterion measure, The Nelson-Denny Reading Test demonstrated no significant differences. Curry and Reynolds (1969) examined the effectiveness of four different techniques in a reading improvement course at The University of Oklahoma, and found no significant differences in reading achievement. Bliesmer (1968) reviewed Berger's study which implemented four methods (tachistoscope, controlled pacing, controlled reader and paperback scanning). All produced significant gains in reading rate with paperback scanning indicated as the best method. There were no significant changes in the average level of comprehension. Hooprich, Anderson and Steinman (Bliesmer, 1968) compared several reading methods and reported the same findings, increases in speed, but not in comprehension.

Soll (1972) reported a procedure at Baruch College where reading classes were scheduled in coordination with specific required freshmen courses. The study skills

practice utilized subject matter assignments. No standardized criteria were implemented. The author expressed the opinion that this procedure is more effective than using commercially published materials, although she cautioned against acceptance of this method as a panacea.

The effect of four different practice schedules on reading and spelling achievement was investigated by Curry and Roberts (1971). Three groups were assigned follow-up activities under supervision, while the fourth group received no practice. The Nelson-Denny Reading Test and the spelling subtest of The Metropolitan Reading Test were the evaluative criteria. There were no significant differences in vocabulary, reading rate and spelling among the four groups, while the first three groups gained on all reading subskills.

Two programs attempted to prepare disadvantaged college freshmen during the summer for their coursework in the fall. Kling (1972) reported a two-week summer course for 61 socially disadvantaged freshmen indicated significant gains (beyond .01 level) on The Nelson-Denny Reading Test. However, he wrote, they were still far below the level of achievement of typical incoming freshmen. Laffey (1968) gave 50 students 26 hours of instruction in reading and study skills. The Davis Reading Test which was the criterion measure indicated results in favor of the post-test. The reported results, however, were not significant. Bowman at the University of Colorado (Bliesmer, 1967) evaluated a pre-college program on the basis of later academic achievement, which was graduation. More of the control students than the experimental students were graduated. He concluded that the precollege program was ineffective.

The reading and study skills programs available to the entering student were generally assigned to the most deficient (Blake, 1954), utilized published materials (Wade, 1967), and did not give academic credit for participation (Blake, 1954). Results were generally reported in terms of pretest and post-test standardized reading scores. Most researchers (Bliesmer, 1967) reported gains. However, these were not always statistically significant.

The relation which may exist between directed reading instruction and academic achievement has been explored by many researchers. Are the skills learned in a reading and study skills course transferable to courses in the subject areas? Can a reading and study skills course help students improve their grade point average? The answers to these questions are of concern to administrators, instructors and students. The results of these investigations as reported in the literature are both positive and negative.

Foxe (Bliesmer, 1968) found no significant effect on chemistry grades or grade point averages of chemistry students, who participated in a supportive program, while Maxwell (Bliesmer, 1968) found that students who participated in the skills program earned more A's in a statistics course. Maxwell did not state whether or not the results indicated statistically a significant difference.

Several researchers reported a significant positive relationship between attendance in a study skills course and grade point average. Belcher (1971) hypothesized that there would be a significant (.05 level) relationship between reading instruction and grade point average. He studied three groups, two received instruction while one served as the control group. All published materials were used for instruction, the Nelson-Denny Reading test was used to evaluate reading achievement and grade point average data were gathered. He concluded that only the group which had received instruction in reading experienced a significant increase in grade point average. His findings are questionable because the procedures were not equivalent for the three groups.

Dalton (1966) found that the grade point average for students who had participated in a reading course was significantly greater after three semesters than the grade point average for non-participating students. Kelly and Mech (1967) found a relationship (.10) between attendance at a college reading laboratory and gains in grade point average. Hafner concluded that completing the reading-study skills course increased the probability that the student would earn a grade point average above 3.0. Freer (Bliesmer, 1968) reported significantly greater one-year grade point averages for a group of junior college students who had participated in a developmental reading program than for the matched group. Ritter (1971) described a reading clinic which was part of The Counseling Service at the University of Manitoba, Winnipeg. For 149 students who were involved a significant gain (.01 level) in grade point average from 2.09 to 2.39 was reported.

Daniels (Bliesmer, 1968) studied underachieving entering freshmen who were divided into four groups; individual counseling, group counseling, study skills and habits course, and a control group. He found no significant differences in grade-point average or in study habits and attitudes among the three groups and a control group.

The studies which investigated the relation between performance on pretest and posttest reading tests and grade point average disclosed that not all of the findings supported the contention that a positive relationship existed between reading achievement on a standardized reading test and grade point average. Pepper (1971) found that only the post-

rate and post-vocabulary scores of the Triggs Diagnostic Test demonstrated a statistically significant relationship to grade point average.

Edgar (Bliesmer, 1967) wrote that academic achievement was independent of reading and study skills changes. Pabst (Bliesmer, 1967) studied 1900 freshmen at Indiana University and concluded that English test scores, not the scores of The Nelson-Denny Reading Test, were good predictors of academic achievement. Malcom (Bliesmer, 1967) found that the study habits of 56 conditional admissions at the University of Southern California were significantly lower than that of other freshmen. He concluded that study habits relate to college success for conditional students. Lembesis (Bliesmer, 1967), in a study of Northern Illinois University dropouts found ability in mechanics of expression to be one of the factors related to college persistence, but reading test scores (vocabulary and comprehension) were not significantly related.

To summarize: Although there is unanimity in the literature that the reading difficulty of the poor college reader may be symptomatic of one or a combination of causes, there are differences in diagnostic procedure, methods implemented, materials employed and evaluative criteria.

Most studies have concerned themselves with "skill building," rather than the implementation of learning theory. The diagnostic procedure is usually a score on a standardized silent reading test. The materials of instruction are generally published materials. The evaluative criterion is generally the post-test score on a parallel form of the reading test employed for diagnosis, or the student's grade-point average.

College students with low reading scores have been found to earn lower grades and to have a higher dropout rate. When these students are enrolled in a reading laboratory course, they tend to indicate an improved grade-point average (although there are studies which did not support this finding).

The studies which investigated methods of teaching reading found no method significantly superior except for Allen (1967) who reported that an experimental group which spent a year of grammar practice made greater gains in reading than did a control group who had given more attention to reading, as such, through instruction with reading materials.

## Linguistic and Reading Theory

Basic to an understanding of the reading process (the interpretation of visual symbols) is an understanding of the individual's use of language. Wark described verbal behavior:

One approach to analyzing adult reading is based on the assumption that comprehension is nothing more than internal talking. In other words, a reader sees a verbal stimulus of some sort. He produces some subvocal, covert response. The same responses produce stimuli for further covert, internal responding. It is this "second level response," controlled in part by what the reader sees and in part by memory, long-range association, context and so on that we call "comprehension" (1968, p. 192).

"Linguists...regard the spoken language as primary and the written as derived from the spoken" wrote Lamberts (1967, p. 5). Several investigators have questioned the linguist's position of speech primacy, for they note that deaf and dumb individuals learn language. Weaver pointed out that, "Most differences between listening and reading which are fairly open to observation involve storage and retrieval differences" (1969, p. 109). He explained his point when he wrote that during reading, a display is available for as long as the reader wishes it to be, while stimuli for listening are only available for intervals which are not controlled by the listener.

The linguist would support the viewpoint that for adequate comprehension to take place, the reader must use language in much the same way as the author does. Goodman clarified this position:

To reconstruct the message, the reader must decode from language. This means that he must know and use the language in pretty much the same way that the writer knows and uses it. It also means that he must have sufficient experience and conceptual development so that the message will be comprehensible to him (1966, p. 188).

This "match" between the individual's language repertoire and the written stimulus is considered critical to reading comprehension by some researchers. Stolurow has written: "...the learner is a receptive mechanism for whom associative connections become formed so as to mirror experience" (1961, p. 51). If the learner were to be presented with materials which mirror his experience, another assumption made by Stolurow would be met, i. e. channeling the learner into the formation of correct responses and preventing him from making the wrong responses. It is therefore assumed that if the language patterns of the reading material are familiar to the

reader, a greater incidence of correct responses will be demonstrated.

The meaning of language lies in an understanding of the syntax. If the reader understands the syntactic pattern, meaning is conveyed. Briggs explained this point when he wrote:

A reader can understand, both more quickly and more efficiently, a sentence when he recognizes the pattern in which it is written and knows the purpose of that pattern, (1967, p. 230).

Although much has been written about comprehension, a definition of the term is still not agreed upon. According to Jenkinson (1966) there are two schools of thought: those who contend that comprehension is not so complex a process, and others who propose that it is a very complex process with many variables.

Smith is one who proposed that:

...comprehension operates at several levels, as required by the complexity of the material. The unit is considered to be the sentence, clauses to be the group of sentences as similar or contrasting in subject and intent, and the system to be the paragraph (1960, p. 25).

The ability of students to read is discussed by Carter. He found that leaders in the liberal arts and sciences are shocked and disturbed by their students inability to make effective use of textbooks and library resources. He wrote that there were three aspects of reading that were essential to a mastery of subject matter in the content fields. It was necessary for the student to identify, interpret, and evaluate words and concepts, (1960, p. 68). Carter also stated that teachers in the content fields had neither the time nor the training to do remedial reading.

The skill involved in deriving adequate meaning from textbooks is further explained by Jenkinson.

The sentences in the written materials of textbooks often contain deeply embedded ideas and meanings and other elements which are unfamiliar to the student in spoken language. ...the printed materials contain logical and subordinate connectives used with greater frequency and these often are the underpinning of greater sentence complexity, (1966, p. 182).

One may imply on the basis of linguistic and learning theory that instruction in the structure of language might

facilitate the learner's attempts to improve his reading.  
Briggs proposed:

It is further suggested that, within the framework of "modern grammar" there are a number of concepts which could give real insight into the meaning of reading, and that there is real opportunity for a reading teacher to investigate these concepts and construct teaching devices which could be of considerable help to students, (1967, p. 230).

The purpose of this study was to investigate whether instruction in English syntax was related to the reading and academic achievement of community college students.

To summarize: It is proposed that underlying the reading process is the individual's knowledge of language, and that the meaning of language lies in an understanding of syntax. The student's ability to make effective use of his textbooks in order to master subject matter may be dependent upon his ability to interpret deeply embedded ideas and meanings which are unfamiliar to him in spoken language.

This study undertook the investigation of the relationship which might exist between instruction in English syntax and the reading and academic achievement of community college students.



## METHODOLOGY

### Setting

This study was undertaken at Bronx Community College of The City University of New York. The school was founded in 1957 to offer a comprehensive educational program of career and transfer curricula. In September, 1970, with the advent of The City University's open admissions policy, many students who might otherwise have been denied admission, entered the school.

The reading and study skills laboratory course in The Department of Special Educational Services was designed to give instruction in reading to students who earned reading scores below a raw score of 60 on The Nelson-Denny Reading Test, Form A during the initial placement screening. In September, 1970 approximately 50% of the entering freshmen composed this category and in September, 1971, approximately 62% of the entering freshmen made up this group, according to Mr. Alexander Simon, reading coordinator.

### Subjects

The ten sections of students of the instructor (project director) were considered subjects of the study. Five sections participated during the Fall, 1971 semester and five sections participated during the Spring, 1972 semester.

All students enrolled in the ten sections assigned to the instructor were considered prospective subjects of the study. Students were assigned to classes according to the time available on their programs. The assignment was random.

Although all of the students in the instructor's classes were considered subjects of the study, some of the subjects were not included, for the following reasons:

1. Only students who were taking the reading and study skills laboratory course for the first time were considered subjects of the study. Students who were repeating the course because they had not achieved minimal competency the previous semester were eliminated from the study.
2. Some students did not complete all the required data for the necessary analysis.
3. Some students withdrew from the college for personal reasons.

A total of 122 students were subjects of the study, 75 in the experimental situation and 47 in the control situation.

### Assignment to Treatment

Half the sections of the instructor (project director) were randomly assigned to the experimental situation and half the sections of the instructor were randomly assigned to the control situation.

Since the element of time scheduled for class might be a variable, classes during the Fall, 1971 semester which were assigned to the experimental condition during a particular time block, were assigned to the control condition during the Spring, 1972 semester. Classes assigned to the control condition during the Fall, 1971 semester during a particular time block were assigned to the experimental condition during the Spring, 1972 semester.

### Instruments

#### A Test of Sentence Meaning

The students' understanding of English syntactic patterns was evaluated by A Test of Sentence Meaning which was developed by Albert D. Marcus (unpublished Doctor's dissertation, New York University, 1969). Marcus reports reliability coefficients ranging from .95 to .89 (1969, p. 69).

He wrote that analyses of the students' mistakes indicated that a number of syntactic features were related to the students' ability to derive the appropriate meaning from sentences, (1969, p. 114). The test measured the understanding of literal meaning through the use of syntactic clues within written standard English sentences, (1969).

Test items evaluated the students' knowledge of 17 grammatical structures that appeared to be representative of basic English syntactic structures and which were adaptable to a multiple choice question format. A Test of Sentence Meaning contains 102 test items with six items constructed for each of the 17 grammatical structures (1969), (see Appendix C).

As implemented in this study a maximum raw score of 180 was calculated for the 102 test items.

The test was administered by the project director to all students during the first week of class, prior to the start of the experimental treatment, and the posttest was administered immediately following the completion of coursework before final examination week.

### The Nelson-Denny Reading Test

Reading achievement was evaluated on the basis of raw scores earned on The Nelson-Denny Reading Test. Form A was administered as the pretest, as part of the initial placement screening of the college. Form B, a parallel form was administered at the end of the reading laboratory course, which is the usual procedure followed in the departmental evaluation of students.

The testmakers report students from junior colleges were included in the population on which the test was standardized. Reliability, reported in the Examiner's Manual, (computed by the equivalent forms method) was reported as follows (1960, p. 26):

Vocabulary	.93
Comprehension	.81
Total	.92

It is suggested that the test may be used for predictive purposes (one of the most important uses on the college level), as a diagnostic instrument (not primarily the nature of this test) and as a screening device (to help separate superior readers from the others in order to fit them into an accelerated class), (1960, pp. 22-23).

The test consists of a vocabulary subtest (100 items for which the student is allowed ten minutes), a comprehension subtest (8 reading selections for which twenty minutes is allowed). Two separate scores are calculated. Then the scores are added to yield a total score. Each dimension may be translated into a grade level score.

Reading rate is another component of the test. This data was not gathered by the investigator.

#### Supplementary Data

Supplementary data relating to the academic experience of the students before college entry as evidenced by high school grades, personal background, and attitudinal scales were compiled with the consideration that these measures would enhance the analysis of the data.

Instruments for the gathering of the data are included in Appendix C.

### Lectures and Teaching Materials

During July, 1971 and August, 1971, prior to the beginning of the study, the project director developed a series of lectures and teaching materials to be used with the students, in accordance with the research design. The theme of the lectures was the study of language, for as Roberts (1967) proposed, linguistics gives us something that is teachable, interesting and pertinent. The lectures were planned to improve reading ability in both the experimental and the control group, (see Appendix A for sample lecture outlines).

Classwork exercises for the reinforcement of skills presented during the lectures utilized materials prepared by the instructor and/or published materials generally used in the reading laboratory course, (see Appendix A for samples of classwork exercises for the control and experimental classes).

### Classroom Procedures

There are generally forty-five instructional hours each semester. A series of twenty-eight hourly lectures was planned. The class time remaining was utilized for individually planned work, a class visit to the library, and class lessons to reinforce or reteach skills which may not have been mastered.

The students reinforced skills demonstrated during lecture classes with assignments indicated by the course outline. The course outline is one developed for use by all faculty members of the department, and none of the students was aware that he was part of an experiment. This procedure was implemented as a control for a possible Hawthorne effect. The course requirements which were outlined by the instructor were distributed to both the control and the experimental groups, (see Appendix B).

The students' assignments were corrected by the instructor. An analysis of the students' homework performance indicated to the instructor the skills which had been mastered and the skills which had to be retaught and reinforced to individual students.

Each student maintained a folder in which he kept his completed assignments (with comments from the instructor), a record of completed coursework and a record of personal assignments from the instructor which were based upon the individual student's demonstrated needs, (see Appendix B).

A personal conference was held with each student in which his reading tests and other diagnostic data were discussed. The instructor and the student jointly set the

objectives for the student's growth in reading for the semester.

### Experimental Treatment

The lectures, classroom procedures, the course outlines, the course requirements and the grading procedures were the same for both the experimental and the control groups, as was the material covered in the lectures.

The major difference in the experimental treatment was in the type of emphasis and materials used for some of the classwork exercises and during the individual assignments designated for the students.

The classwork exercises for the experimental group utilized materials selected by the instructor from historical source materials, college textual materials from various disciplines, or were written by the instructor on a college level.

The classwork exercises for the control group utilized materials selected from the published practice materials generally used in the reading and study skills course.

The individual assignments for the experimental group involved directed practice in the analysis of syntactic patterns. These were constructed by the instructor and assigned on the basis of an analysis of the student's errors on A Test of Sentence Meaning, (see Appendix A for samples).

The individual assignments for the control group involved practice with published materials such as SRA Reading Laboratory and the RFU Reading Laboratory, published by Science Research Associates.

## ANALYSES AND FINDINGS

In order to test the hypotheses, two statistical procedures were implemented; the Pearson Product-Moment Coefficient of Correlation and the analysis of covariance. Table 1 presents the means and standard deviations of the study variables.

TABLE 1

MEANS AND STANDARD DEVIATIONS OF STUDY VARIABLES

<u>Dimension</u>	<u>Mean</u>	<u>Standard Deviation</u>
High School Average	71.03	5.05
High School English Average	72.33	6.02
High School Mathematics Average	66.05	15.03
High School Science Average	68.76	12.75
Nelson-Denny Total (pretest)	42.44	11.87
Nelson-Denny Vocabulary (pretest)	18.14	6.47
Nelson-Denny Comprehension (pretest)	24.30	7.28
Nelson-Denny Total (posttest)	56.90	13.73
Nelson-Denny Vocabulary (posttest)	27.40	8.84
Nelson-Denny Comprehension (posttest)	29.60	7.09
A Test of Sentence Meaning Total (pretest)	144.48	25.88
<u>Sentence Patterns</u>		
# 1 Ind. obj./dir. obj. sequence	5.01	1.31
# 2 Rel. clause modifies sub.		
# 3 Pass. voice in comp. sent. where rel. clause is passive	10.10	2.33
# 4 Rel. clause modifies dir. obj.	10.15	2.24
# 5 Rel. clause modifies obj. of the preposition	10.50	2.25
# 6 Structures of Modification: Comp. sent.---2 rel. clauses	9.45	2.74
# 7 Structures of Complementation: Dir. obj./obl. comp. sequence	9.27	2.88
# 8 Structures of Complementation: Subj. compl. embedded as mod.	10.00	2.02
# 9 Structure of Modification: Prep. phrase as noun, verb or sentence modifier	9.42	2.42
#10 Structure of Predication: Passive voice in simple sent.	8.65	2.39
#11 Included clauses as modifiers, subjects and complements	5.26	1.20
#12 Recognition of Transformations of nom. into active verbs	4.26	1.45
#13 Coordination of phrases	3.46	1.67
#14 Elliptical structures of coordination	10.73	1.98
	10.58	2.22

TABLE 1 (continued)

<u>Dimension</u>	<u>Mean</u>	<u>Standard Deviation</u>
#15 Coordination of subordinate clauses	9.89	2.72
#16 Coordination of clauses	10.37	3.04
#17 Combinations of structures	8.63	3.41
A Test of Sentence Meaning Total (posttest)	158.65	18.6
<u>Sentence Patterns</u>		
# 1 Ind. obj./dir. obj. sequence	5.41	.94
# 2 Rel. clause modifies sub. Pass. voice in comp. sent.	11.28	1.25
# 3 Pass. voice in comp. sent. where rel. clause is passive	11.06	1.36
# 4 Rel. clause modifies dir. obj.	11.25	1.42
# 5 Rel. clause modifies obj. of the preposition	10.60	1.81
# 6 Structures of Modification: Comp. sent.---2 rel. clauses	10.44	1.84
# 7 Structures of Complementation: Dir. obj./obj. comp. sequence	10.76	1.74
# 8 Structures of Complementation: Subj. compl. embedded as mod.	10.66	1.74
# 9 Structure of Modification: Prep. phrase as noun, verb or sentence modifier	9.72	1.80
#10 Structure of Predication: Pass. voice in simple sent.	5.36	1.08
#11 Included clauses as modifiers, subjects and complements	4.49	1.36
#12 Recognition of Transformations of nom. into active verbs	4.04	1.51
#13 Coordination of phrases	11.26	1.77
#14 Elliptical structures of coordination	11.20	1.67
#15 Coordination of subordinate clauses	10.33	2.80
#16 Coordination of clauses	10.86	2.30
#17 Combinations of structures	10.52	6.90
Semester credits---non-degree	3.40	3.36
Semester credits---degree	5.55	4.58
Semester index---non-degree	1.74	1.49
Semester index---degree	1.78	1.25
Cumulative index	1.86	1.04
Total cumulative credit	9.24	8.13

The first test was a correlation between scores of the subjects on A Test of Sentence Meaning, Total Score (pretest) and the initial scores of all students, experimental and control, on The Nelson-Denny Reading Test, Total Score (pretest). The procedure employed was the computation of the Pearson Product-Moment Coefficient of Correlation.

The data were submitted to additional analyses with the computation of correlation coefficients between:

- a. A Test of Sentence Meaning, Total Score (pretest) and the vocabulary subtest of The Nelson-Denny Reading Test (pretest).
- b. A Test of Sentence Meaning, Total Score (pretest) and the comprehension subtest of The Nelson-Denny Reading Test (pretest).
- c. A Test of Sentence Meaning, Total Score (posttest) and the total score of The Nelson-Denny Reading Test, Total Score (posttest).
- d. A Test of Sentence Meaning, Total Score (posttest) and the vocabulary subtest of The Nelson-Denny Reading Test (posttest).
- e. A Test of Sentence Meaning, Total Score (posttest) and the comprehension subtest of The Nelson-Denny Reading Test (posttest).

TABLE 2

CORRELATION COEFFICIENTS OF STUDY VARIABLES

	A Test of Sentence Meaning Total (Pretest)	Probability	A Test of Sentence Meaning Total (Posttest)	Probability
Nelson-Denny Reading Test Total (pretest)	.230	<.01	.341	<.01
Nelson-Denny Reading Test Vocabulary (pretest)	.190	<.05	.420	<.01



TABLE 2 (continued)

	A Test of Sentence Meaning Total (Pretest)	Probability	A Test of Sentence Meaning Total (Posttest)	Probability
Nelson-Denny Reading Test Comprehension (pretest)	.206	<.05	.281	<.01
Nelson-Denny Reading Test Total (posttest)	.329	<.01	.437	<.01
Nelson-Denny Reading Test Vocabulary (posttest)	.289	<.01	.383	<.01
Nelson-Denny Reading Test Comprehension (Posttest)	.279	<.01	.357	<.01

Findings:

As can be seen from Table 2, there are significant positive relationships among the study variables.

The second test was a comparison between methods, the experimental group versus the control group. The dependent variable was reading achievement. The procedure employed was the analysis of covariance with the pretest scores of The Nelson-Denny Reading Test as the covariates.

Specifically:

1. Experimental group versus control group Analysis of Covariance---pretest (total score) of The Nelson-Denny Reading Test was the covariate, and the posttest score (total score) of The Nelson-Denny Reading Test was the dependent variable. Tables 3, 4 and 5 present the data analysis.

2. Experimental group versus control group  
Analysis of Covariance---pretest (vocabulary score) of The Nelson-Denny Reading Test was the covariate, and the posttest (vocabulary score) of The Nelson-Denny Reading Test was the dependent variable. Tables 6, 7 and 8 present the data analysis.
3. Experimental group versus control group  
Analysis of Covariance---pretest (comprehension score) of The Nelson-Denny Reading Test was the covariate, and the posttest (comprehension score) of The Nelson-Denny Reading Test was the dependent variable. Tables 9, 10 and 11 present the data analysis.

TABLE 3

MEANS FOR THE COVARIATE (Nelson-Denny Total---pretest)  
(Experimental versus Control)

<u>Treatment</u>	<u>Mean</u>
Experimental	42.71
Control	42.00

TABLE 4

ORIGINAL AND ADJUSTED MEANS ON THE READING ACHIEVEMENT VARIABLE\*  
(Experimental versus Control)

<u>Treatment</u>	<u>Original Mean</u>	<u>Adjusted Mean</u>
Experimental	59.11	58.91
Control	53.40	53.71

\* Table 3 indicates the means for the covariate.

TABLE 5

ANALYSIS OF COVARIANCE ON THE READING ACHIEVEMENT VARIABLE\*  
(Experimental versus Control)

<u>Source of Variation</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Between Methods	1	792.70	792.70	7.27**
Within (error)	121	13197.90	109.07	
Total	122	13990.60		

\* Table 3 indicates the means for the covariate.  
\*\* Significant  $<.01$ .

TABLE 6

MEANS FOR THE COVARIATE (Nelson-Denny Vocabulary---pretest)  
(Experimental versus Control)

<u>Treatment</u>	<u>Mean</u>
Experimental	17.97
Control	18.40

TABLE 7

ORIGINAL AND ADJUSTED MEANS ON THE VOCABULARY VARIABLE\*  
(Experimental versus Control)

<u>Treatment</u>	<u>Original Mean</u>	<u>Adjusted Mean</u>
Experimental	28.86	29.00
Control	25.06	24.86

\* Table 6 indicates the means for the covariate.

TABLE 8  
ANALYSIS OF COVARIANCE ON THE VOCABULARY VARIABLE\*  
(Experimental versus Control)

<u>Source of Variation</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Between Methods	1	504.79	504.79	10.28**
Within (error)	121	5939.99	49.09	
Total	122	6444.78		

\* Table 6 indicates the means for the covariate.

\*\* Significant  $< .01$ .

TABLE 9  
MEANS FOR THE COVARIATE (Nelson-Denny Comprehension---pretest)  
(Experimental versus Control)

<u>Treatment</u>	<u>Mean</u>
Experimental	24.74
Control	23.60

TABLE 10  
ORIGINAL AND ADJUSTED MEANS ON THE COMPREHENSION VARIABLE\*  
(Experimental versus Control)

<u>Treatment</u>	<u>Original Mean</u>	<u>Adjusted Mean</u>
Experimental	30.39	30.22
Control	28.33	28.60

\* Table 9 indicates the means for the covariate.

TABLE 11  
ANALYSIS OF COVARIANCE ON THE COMPREHENSION VARIABLE\*  
(Experimental versus Control)

<u>Source of Variation</u>	<u>Degree of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Between Methods	1	77.61	77.61	1.822 N.S.**
Within (error)	121	5154.44	42.60	
Total	122	5232.05		

\* Table 9 indicates the means for the covariate.

\*\* Not significant.

Findings: The analyses indicate the following:

1. There is a significant difference between the achievement of the experimental and the control group in the direction of the experimental group, on the total reading score beyond the .01 level.
2. There is a significant difference between the achievement of the experimental and the control group in the direction of the experimental group, in vocabulary beyond the .01 level.
3. The difference between the experimental and the control group in comprehension is not statistically significant, although the mean of the experimental group is greater than the mean of the control group.

The data were submitted to additional analysis by comparing the experimental group with the control group in knowledge of English syntax.

The procedure employed was the analysis of covariance with the pretest scores of A Test of Sentence Meaning as the covariate.

TABLE 12  
 MEANS FOR THE COVARIATE (A Test of Sentence Meaning-pretest)  
 (Experimental versus Control)

<u>Treatment</u>	<u>Mean</u>
Experimental	144.92
Control	143.79

TABLE 13  
 ORIGINAL AND ADJUSTED MEANS ON THE SYNTACTIC ACHIEVEMENT VARIABLE\*  
 (Experimental versus Control)

<u>Treatment</u>	<u>Original Mean</u>	<u>Adjusted Mean</u>
Experimental	154.17	154.01
Control	155.81	156.06

\* Table 12 indicates the means for the covariate.

TABLE 14  
 ANALYSIS OF COVARIANCE ON THE SYNTACTIC ACHIEVEMENT VARIABLE\*  
 (Experimental versus Control)

<u>Source of Variation</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Between Methods	1	122.99	122.99	.142 N.S. **
Within (error)	121	104865.01	866.65	
Total	122	104987.99		

\* Table 12 indicates the means for the covariate.  
 \*\* Not significant

### Findings:

The difference between the experimental and the control group in knowledge of English syntax is not significant.

The third test was a comparison between the grade point average of the experimental group and the control group. The procedure employed was the analysis of covariance with the pretest scores of A Test of Sentence Meaning as the covariate.

### Specifically:

1. Experimental group versus control group  
Analysis of Covariance---pretest (total score) of A Test of Sentence Meaning was the covariate, and the semester credits earned in non-degree courses was the dependent variable. Tables 15 and 16 present the data.
2. Experimental group versus control group  
Analysis of Covariance---pretest (total score) of A Test of Sentence Meaning was the covariate, and the semester credits earned in degree courses was the dependent variable. Tables 15 and 16 present the data.
3. Experimental group versus control group  
Analysis of Covariance---pretest (total score) of A Test of Sentence Meaning was the covariate, and the semester index in non-degree courses was the dependent variable. Tables 15 and 16 present the data.
4. Experimental group versus control group  
Analysis of Covariance---pretest (total score) of A Test of Sentence Meaning was the covariate, and the semester index in degree courses was the dependent variable. Tables 15 and 16 present the data.
5. Experimental group versus control group  
Analysis of Covariance---pretest (total score) of A Test of Sentence Meaning was the covariate, and the cumulative index (determines the student's status) was the dependent variable. Tables 15 and 16 present the data.
6. Experimental group versus control group  
Analysis of Covariance---pretest (total score) of A Test of Sentence Meaning was the covariate, and total cumulative credit was the dependent variable. Tables 15 and 16 present the data.

TABLE 15  
 GRADE POINT AVERAGE, FALL, 1971  
 FOR EXPERIMENTAL VERSUS CONTROL GROUPS

Variable	Experimental Means		Control Means		F	P
	Orig.	Adj.	Orig.	Adj.		
Semester credit Non-degree	1.41	1.41	2.08	2.07	1.2	N.S.
Semester credit Degree	6.54	6.51	6.54	6.58	.01	N.S.
Semester index Non-degree	1.75	1.74	1.73	1.74	.00	N.S.
Semester index Degree	1.55	1.56	1.68	1.67	.14	N.S.
Cumulative index (Status)	1.89	1.89	1.76	1.77	.23	N.S.
Total cumulative credit	12.51	12.45	11.42	11.51	.16	N.S.

TABLE 16  
 GRADE POINT AVERAGE, SPRING, 1972  
 FOR EXPERIMENTAL VERSUS CONTROL GROUPS

Variable	Experimental Means		Control Means		F	P
	Orig.	Adj.	Orig.	Adj.		
Semester credit Non-degree	5.40	5.46	5.33	5.23	.06	N.S.
Semester credit Degree	4.94	5.00	4.48	4.38	.48	N.S.
Semester index Non-degree	2.83	2.84	2.67	2.66	.64	N.S.
Semester index Degree	2.08	2.08	1.76	1.75	.90	N.S.
Cumulative index (Status)	1.87	1.87	1.79	1.78	.09	N.S.
Total cumulative credit	6.40	6.52	6.90	6.69	.01	N.S.



### Findings:

There were no significant differences between the grade point average of the experimental group and the grade point average of the control group in either the Fall, 1971 semester or the Spring, 1972 semester.

The data recorded in Table 15 for the Fall, 1971 students indicates achievement during their second semester at Bronx Community College. The mean for the experimental group on both cumulative index which determines the student's academic status, and the total cumulative credits, were greater than the mean for the control group.

The data recorded in Table 16 for the Spring, 1972 students indicates achievement during their first semester at Bronx Community College. The mean for the experimental group on the cumulative index which determines the student's academic status was greater than the mean for the control group.

### Supplementary Analyses

The question of whether students who had selected major fields of study in the various curricula would, through self-selection, indicate differential achievement was explored. The sample consisted of 124 students divided into four categories as follows:

Business consisted of:  
N=52

Business Administration  
Business Teaching  
Data Processing  
Secretarial Studies

Engineering consisted of:  
N=11

Chemical Technology  
Engineering Technology  
Engineering Science  
Electrical Technology  
Mechanical Technology

Liberal Arts and Science consisted of:  
N=46

Education Associate  
Liberal Arts and Science  
Performing Arts and Music

Medical consisted of:  
N=15

Medical Laboratory Technician  
Nursing

The statistical procedures implemented were the analyses of variance and covariance. Table 17 presents the data.

TABLE 17

Comparison Among Students Enrolled in Various Curricula

Variable	Means					P
	Business	Engineering	Lib. Arts.	Medical	F	
High School Average	72.24	71.00	69.59	70.42	1.66	N. S.
English Average	72.84	73.70	71.96	70.50	.65	N. S.
Math Average	66.82	68.43	66.32	60.56	.48	N. S.
Science Average	69.77	67.78	67.26	70.44	.26	N. S.
Nelson-Denny Pretest						
Total	42.35	48.82	40.11	45.20	1.95	N. S.
Vocabulary	18.00	20.09	17.70	18.53	.42	N. S.
Comprehension	24.35	28.73	22.41	26.67	3.04	<.05*
Nelson-Denny Posttest						
Total	58.08	59.46	53.80	60.40	1.36	N. S.
Vocabulary	28.35	29.64	25.46	28.40	1.23	N. S.
Comprehension	29.73	29.82	28.61	32.00	.87	N. S.
A Test of Sentence Meaning Pretest						
Total	148.75	139.91	140.15	146.33	1.03	N. S.
Pattern #1	5.00	5.64	4.83	5.13	1.18	N. S.
Pattern #2	10.50	10.27	9.30	11.00	3.19	<.05*
Pattern #3	10.54	10.09	9.67	10.24	1.22	N. S.
Pattern #4	11.04	10.09	9.74	11.27	3.65	<.05*
Pattern #5	9.64	9.09	8.96	10.60	1.53	N. S.
Pattern #6	9.50	8.64	8.83	10.33	1.34	N. S.
Pattern #7	10.19	10.18	9.65	10.27	.72	N. S.
Pattern #8	9.94	9.46	8.72	9.73	2.24	N. S.
Pattern #9	8.84	9.36	8.20	8.87	1.03	N. S.
Pattern #10	5.37	5.64	4.91	5.67	2.40	N. S.
Pattern #11	4.19	4.18	4.15	4.87	1.00	N. S.
Pattern #12	3.73	3.09	3.15	3.73	1.30	N. S.

TABLE 17 (continued)

<u>Variable</u>	<u>Business</u>	<u>Engineering</u>	<u>Lib. Arts.</u>	<u>Medical</u>	<u>F</u>	<u>P</u>
Pattern #13	10.94	10.27	10.91	9.73	1.82	N.S.
Pattern #14	10.60	8.46	10.98	10.87	4.24	<.01*
Pattern #15	9.98	8.73	9.87	10.47	.90	N.S.
Pattern #16	10.29	10.55	10.33	10.67	.07	N.S.
Pattern #17	8.71	9.46	8.04	9.53	1.02	N.S.
A Test of Sentence Meaning Posttest						
Total	160.90	156.82	153.53	167.80	2.71	<.05*
Pattern #1	5.40	5.73	5.29	5.60	.86	N.S.
Pattern #2	11.30	11.64	11.09	11.53	.85	N.S.
Pattern #3	11.04	11.82	10.78	11.40	2.14	N.S.
Pattern #4	11.42	11.09	10.91	11.80	1.91	N.S.
Pattern #5	10.74	10.55	10.27	11.20	1.16	N.S.
Pattern #6	10.52	10.00	10.18	11.27	1.57	N.S.
Pattern #7	10.98	10.36	10.40	11.40	1.80	N.S.
Pattern #8	10.76	11.09	10.36	10.93	.86	N.S.
Pattern #9	9.78	10.00	9.27	10.67	2.52	N.S.
Pattern #10	5.44	5.36	5.20	5.60	.65	N.S.
Pattern #11	4.62	3.91	4.24	5.20	2.79	<.05*
Pattern #12	4.16	4.46	3.69	4.40	1.48	N.S.
Pattern #13	11.50	11.64	10.76	11.73	2.10	N.S.
Pattern #14	11.42	10.55	11.00	11.53	1.27	N.S.
Pattern #15	10.46	9.46	10.00	11.53	1.53	N.S.
Pattern #16	11.18	10.36	10.40	11.53	1.53	N.S.
Pattern #17	11.66	8.18	9.69	10.47	.89	N.S.
Semester credits	2.52	3.64	3.39	6.33	5.53	<.01**
non-degree						
Semester credits	6.81	3.00	4.72	5.60	3.07	<.05*
degree						
Semester index	1.38	1.49	1.90	2.73	3.75	<.05*
non-degree						

TABLE 17 (continued)

<u>Variable</u>	<u>Business</u>	<u>Engineering</u>	<u>Lib. Arts.</u>	<u>Medical</u>	<u>F</u>	<u>P</u>
Semester index degree	1.63	1.16	2.00	2.07	1.90	N. S.
Cumulative index (status)	1.75	1.37	2.17	1.68	2.52	<.05*
Total cumulative credits	11.35	6.55	8.02	7.60	2.15	N. S.

\* Significant <.05

\*\*Significant <.01

N. S. Not significant

### Findings:

Although the comparisons between curricula groups on the variables studied generally failed to indicate statistical significance, it was interesting to note that on almost all of the variables, either the engineering students or the medical students achieved the highest mean score.

On The Nelson-Denny Reading Test---Pretest, the engineering students earned the highest mean on total score (not significant), vocabulary (not significant), and comprehension (significant .05). On The Nelson-Denny Reading Test---Posttest, the medical students earned the highest mean on total score (not significant), and comprehension (not significant), while the engineering students earned the highest mean in vocabulary (not significant).

The business students earned the highest mean on A Test of Sentence Meaning---Pretest, total score (not significant), and the medical students earned the highest mean on A Test of Sentence Meaning---Posttest, total score (significant .05).

On the variable, semester index in non-degree courses, the medical students earned the highest mean (significant .05) and the highest mean on the variable, semester index degree courses (not significant).

The variable cumulative index which determines a student's academic status indicated that liberal arts students in this sampling had achieved the highest mean (significant .05), while business students had accumulated the greatest number of credits (not significant).

A comparison between students within the same curriculum, by treatment did not indicate any statistically significant differences between the experimental and the control group.

### Summary of Findings

1. The first hypothesis had stated that the students who earned higher scores in reading achievement would indicate a better understanding of English syntactic patterns than the students who earned lower scores in reading achievement.

The first hypothesis was upheld. The data analyses support the hypothesis. The reading achievement scores of community college students indicated a significant positive relationship to the students' understanding of English syntactic patterns.

2. The second hypothesis had stated that there would be a significant positive relationship between directed instruction in English syntactic patterns and reading achievement scores. Students who received directed instruction in English syntactic patterns would achieve higher reading scores than students who did not receive directed instruction in English syntactic patterns.

The second hypothesis was partially upheld.

The comparison between the achievement of the experimental and the control group on the variable, total reading indicated a significant difference beyond the .01 level in the direction of the experimental group.

The comparison between the achievement of the experimental and the control group on the variable, vocabulary indicated a significant difference beyond the .01 level in the direction of the experimental group.

The comparison between the achievement of the experimental and the control group on the variable, comprehension failed to indicate a significant difference between groups, although the mean for the experimental group was greater than the mean for the control group.

3. The third hypothesis had stated that there would be a positive relationship between directed instruction in English syntactic patterns and grade point average of students. Students who received directed instruction in English syntactic patterns would achieve higher grade point averages than students who did not receive directed instruction in English syntactic patterns.

The third hypothesis was not upheld. The means for the experimental group were somewhat greater than the means for the control group, but all of the variables analyzed failed to indicate statistical significance.

#### Supplementary Analyses

1. A comparison between students who had received directed instruction in English syntax and those who had not received directed instruction in English syntax, failed to indicate a statistically significant difference in achievement in knowledge of English syntax as measured by A Test of Sentence Meaning. The original and the adjusted means for the

experimental group and the control group were not very different on the variable, knowledge of English syntax.

2. Comparisons among students in various curricula generally failed to indicate statistical significance. It is interesting to note, however, that engineering students or medical students generally achieved the highest mean score on the study variables.

## DISCUSSION

### Language Ability and Reading Achievement

The findings of this study support the contention of linguists who propose that comprehension of language underlies reading ability. Students who earned higher scores in reading achievement did demonstrate a better understanding of English syntactic patterns than the students who earned lower scores in reading achievement.

It has been proposed that the meaning of language lies in an understanding of the syntax. When a reader has mastered the vocabulary of a language, the meaning of the words is probably realized as soon as his eye perceives the words. But the idea conveyed by a sentence or a paragraph is not the sum total of the individual meanings of the words. The meaning of each word in the sentence is modified by what precedes and what follows it, for each word does not exist independently in the sentence. The idea of the whole sentence dominates the parts of the sentence. The idea of the whole paragraph dominates the parts of the paragraph. The idea will be conveyed to the reader if he understands the syntax of the language.

An analysis of the abilities of the subjects of this study, students who demonstrated reading deficiency, indicated a general inability to detect the idea conveyed by the sentence or the paragraph, although the meanings of the individual words presented no difficulty. The student who is a deficient reader demonstrates an inflexibility in his approach to reading.

When the deficient reader is asked to paraphrase the thought of a sentence, he often resorts to repetition of the sentence or part of the sentence and maintains the word order of the author. When the deficient reader is asked to paraphrase the thought of a paragraph, he generally selects the first sentence of the paragraph (since the topic sentence is often in this position) and repeats the sentence maintaining the word order of the author. One may infer from this dependence on the vocabulary and word order of the author that the deficient reader does not process the ideas, but merely imitates the surface structure of the message.

In contrast, the student who is an efficient reader anticipates the meaning of the sentence or paragraph. He is not dependent upon the vocabulary or the word order of the author. The general message of the written material appears to be communicated to the efficient reader even before he has visually perceived the entire sentence or paragraph. The efficient reader demonstrates flexibility in his approach to reading material. Different words of



equivalent meanings are read with facility. The efficient reader can paraphrase the thought of what he reads with ease.

Would instruction in English syntax alter the observed behavior of the deficient student and facilitate his attempts to derive meaning from written materials? This study found that the students who received instruction in English syntax did achieve higher scores in total reading and vocabulary which were statistically significant, and in comprehension which was not statistically significant.

Other investigators (Carpenter and Sawyer, 1971, Pepper, 1971, Hooprich, Anderson and Steinam, 1966) report significant increases in total reading, vocabulary and rate but not in comprehension as a result of treatment.

It may be that our understanding of what "comprehension" consists of is inadequate. Kingston raised this question when he wrote:

Are our difficulties in improving comprehension due to the fact that it is more fundamental to total personality organization, and hence, more difficult to alter or change? Or is reading comprehension so complicated by non-measurable factors that our tests lack precision for appraising changes (1960, p. 91).

Jenkinson (1966) is another among many who sought to understand and describe comprehension. As this factor is measured by the Nelson-Denny Reading Test, the effect of instruction in English syntax may not be statistically significant, although the experimental group has undergone change. The following considerations are suggested:

The time allowed for the completion of the comprehension part of the reading test may have contaminated the results. The time devoted during the semester to directed instruction in English syntax may not have been sufficient to reduce the message carried in syntactic patterns to an unconscious process in the students. With more repetition and time to integrate learned behavior from a conscious act to an unconscious one, the mind may be freed from attention to the details, and make the act of deriving meaning a more facile one. With greater facility, the reading time might be reduced, and a statistically significant difference between groups might be demonstrated.

The finding that students who did not receive directed instruction in English syntax also improved in their knowledge of English syntax is an interesting one. The reading laboratory practice which employed published materials may have facilitated the learning of English syntax which the students

in the control group evidenced, for no significant difference was found between the experimental and the control group in achievement in English syntactic patterns. Perhaps like children who learn the grammar of their language without directed instruction, the exposure to the formal English of the college environment and the reading practice materials improved the knowledge of English syntax of the control group without directed instruction.

### Reading Instruction and College Achievement

The relation between reading instruction for the deficient student and college achievement is of considerable interest. At the end of the first semester, the students of the study had accumulated a mean of a little more than six college level credits. Eagle, et. al. (1972, Table 3) report that 64% of the class entering in September, 1971 fell into this category. The students of the experimental group indicated a mean cumulative index of 1.89. Eagle, et. al. (1972, Table 8) report that of the class entering in September, 1971, 43.2% fell below this index range, while 50.2% fell above this index range. 6.6% of the entering class of September, 1971 were in this index group.

It would appear that the subjects of the study are at about the middle range of the college population. Since those students who were in greatest need of academic supportive services were assigned to the reading laboratory, one may infer that the students had profited from the remedial experience.

A cumulative index of 2.0 is necessary for graduation from Bronx Community College. The freshman year is generally a difficult one for all students, and especially so for one who is academically unprepared, yet these students indicated a mean cumulative index of 1.89. On the basis of this first year's achievements, it is possible that these students will meet the academic standards necessary for graduation.

To summarize: A knowledge of English syntax appears to be related to achievement in reading. For the student who is deficient in reading, instruction in English syntax may facilitate learning to read.

Reading instruction gives evidence of aiding the deficient student in meeting the demands of achievement in the other areas of the college curriculum.

## RECOMMENDATIONS

The findings of the study present implications that relate to the theory and application of psychological, linguistic and educational principles in the diagnosis and evaluation of the learner, and to current teaching methods implemented in the community colleges. The findings raise questions concerning relationships for which "common-sense" theories offer inadequate explanations.

### Implications for Research Related to the Learning Process

The part of a reader's behavior labeled "comprehension" is imperfectly understood. Throughout the literature, one finds reference to the assumption that comprehension is nothing more than internal talking, for language is speech and writing is a recodification of speech. If one accepts this definition then we may imply that the student's speech should match the syntactic pattern of the material to be read, if meaning is to be conveyed. The findings of this study question this assumption.

There are many differences between spoken and written language. It is possible to give students directed instruction in the meaning carried within the syntax of the written sentence. The subjects in the experimental group of this study demonstrated achievement superior to that of the control group in reading when they received directed instruction in the analysis of the written sentence.

The study was conducted with subjects who demonstrated deficiency in reading achievement. Research is needed to gain an understanding of the problems of students who are ill-equipped with formal language in terms of the development of cognitive patterns of thinking. Would a study which compared proficient students and deficient students in their knowledge of English syntax and reading achievement result in the same findings? The concept of reading comprehension should be subjected to further research.

### Implications for Research Related to Measurement

Most studies reviewed in the literature fail to report statistically significant gains in comprehension as a result of treatment. What information does the comprehension score of the standardized reading test yield regarding the student's ability to derive meaning from the textual materials he encounters in the subject areas? The texts from which students are expected to obtain knowledge often present deeply embedded ideas which are highly complex. It is questionable whether the ability necessary for academic achievement is adequately measured by the standardized reading test.

Research is needed which will evaluate and develop instruments of measurement of reading ability. For instruction to be relevant, it should be based on an evaluation of the abilities of the student and directed to meet the needs of the student. Research to develop instruments of measurement is called for.

### Considerations for the Community College

Many suggestions are offered for the improvement of instruction in the community colleges, however few are based on empirical research. Weber described the situation when he wrote: "There is little evidence of institutional or departmental research efforts, either exerted or accomplished in the community colleges," (1968, p. 32).

A good beginning might be made if instruction were to shift from emphasis on content presented in traditional lectures, to emphasis on student abilities where the content would be presented in instructional procedures which would maximize achievement. Cohen (1969) suggested that ways of thinking rather than facts should be central to the planning of course content, and that instruction should be considered in terms of its effect on individual students.

The programs of the community colleges are often evaluated in terms of the number of students who transfer to four year institutions. Consideration might be given to evaluating a program in terms of meeting its own objectives rather than meeting the objectives of an upper level institution.

It is concluded that much research relating to the achievement of community college students still remains to be undertaken. The rapid growth of the community college and the promise it holds for students who might otherwise not have realized post-secondary education make this a critical area of investigation.

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## Appendix A

### The Series of Lectures

A series of lectures and teaching materials were developed in accordance with the research design. The lectures were planned to give directed instruction in skills designed to improve reading ability.

1. What is reading?
2. Reading and Language
3. The History of the English Language---An Introduction to the Dictionary
4. Reading the Dictionary Entry
5. A review of the Rules of Syllabication
6. The Morpheme---a Unit of Meaning
7. Instruction in Individualized Assignments
  - a. Using the SRA Reading Laboratory
  - b. Using the RFU Reading Laboratory
  - c. Instructor-developed exercises to improve comprehension of English syntactic patterns (experimental group only).
  - d. Specific exercises developed and assigned to individual students to meet individual needs
8. The Use of the Library
9. The Order of Words in Sentences
10. Figurative Language
11. How to Use the Context to Gain Meaning
12. The Organization of Reading Material
13. The Topic Sentence
14. More About the Topic Sentence
15. Outlining
16. Practice in Outlining While Listening
17. How to Study a Textbook
18. Applying Textbook Reading Skills to a College Textbook
19. Studying Mathematics and Science
20. Taking Notes as You Listen
21. Examinations and Remembering
22. Inferences
23. The Author's Presentation of Proof
24. More About Evaluating What You Read
25. Writing a Term Paper
26. Building Reading Speed
27. The Essay
28. Writing an Essay for an Exam

## Sample Lesson

### The Sounds and Letters of English

Language is primarily a set of speech sounds. Speech sounds provide the raw material for every language. In order to convey meaning, however, speech sounds must be systematically arranged. For this purpose, each language has a system of its own whereby the sounds it uses are arranged into meaningful patterns.

Generally every native speaker of a language automatically uses and reacts to the sound patterns of his own language. Consequently, many of the speech sounds of English, for example, may be strange to speakers of other languages. The basic sounds of English are combined in various ways to form more than one million words. As a native speaker of English, you can easily recognize the basic sounds of your language. Nevertheless you may be confused concerning the relationship between the sounds and the letters in our alphabet. Letters themselves are not sounds. Because there are more English sounds than there are letters of the alphabet to represent them, the relationship is particularly troublesome.

### Phonemes---Units of Sound

Say the following words. How do they differ in their pronunciations? What unit of sound in each word is the cause of the differences in the meanings of the words?

get            met            set

Each of those words has three separate and basic sounds. Two of those basic sounds---the sounds represented by the letters e and t---are the same in each word. But the first sound in each word---represented by the letters g, m, and s make the differences in the meanings of the words. As a native speaker of English, you can easily distinguish the significant sounds that make one word different from another word. Any unit of speech sound that causes such a significant difference is called a phoneme. (Phon---refers to "sound," ---eme refers to "unit.")

Say each of the following words and determine how many phonemes there are in each word. Which phonemes cause the differences in pronunciation and meaning between these words?

pat            pet            pit            pot            put

Each of these words has three phonemes. But only the middle phoneme in each word---represented by the letters a, e, i, o, and u---makes the difference in pronunciation and spelling.



## Graphemes

Phonemes are not to be confused with letters of the alphabet which are called graphemes. (Graph---refers to "writing," ---eme refers to "unit.") Graphemes include not only letters, but also punctuation marks and numerals. Linguists represent sounds, or phonemes, by putting symbols between slanting lines, like this: /j/. The /j/ sound is not to be confused with the name of the letter with which it is written. For example, the letter j is called jay, but the /j/ indicates the sound in words like jump.

When phonemes are systematically combined, they form the words of a language. For example, what English words would the systematic arrangements of /p/, /i/, and /t/ produce?

## Consonant Phonemes

Linguists classify phonemes into several groups. One of the groups of speech sounds, or phonemes, contains consonants. A consonant is a speech sound that is usually made by a partial stoppage of the breath, caused by some interference of the teeth, the lips, or the tongue.

The following chart is a guide to help you identify and pronounce the various consonant sounds in English.

* /b/	The first sound in <u>book</u> and the last in <u>job</u>
/p/	The first sound in <u>pot</u> , and the second in <u>spot</u> and the last in <u>top</u>
* /d/	The first sound in <u>dot</u> and the last in <u>sad</u>
/t/	The first in <u>top</u> , the second in <u>stop</u> , and the last in <u>sat</u>
* /g/	The first sound in <u>get</u> and the last in <u>log</u>
/k/	The first sound in <u>cake</u> , the second in <u>skate</u> , and the last in <u>clock</u>
* /v/	The first sound in <u>vase</u> and the last in <u>give</u>
/f/	The first sound in <u>fun</u> and the last in <u>cliff</u>
* /z/	The first sound in <u>zoo</u> and the last in <u>goes</u>
/s/	The first sound in <u>sit</u> and the last in <u>gets</u>
* /j/	The first sound in <u>jam</u> and the last in <u>fudge</u>
/c/	The first sound in <u>charm</u> and the last in <u>patch</u>
* /θ/	The first sound in <u>thee</u> and the last sound in <u>breathe</u>
/θ/	The first sound in <u>thin</u> and the last in <u>cloth</u>
* /ʒ/	The middle consonant in <u>measure</u> and in <u>vision</u>
/ʒ/	The first sound in <u>shame</u> and the last in <u>dash</u>
* /m/	The first sound in <u>met</u> and the last in <u>ram</u>
/n/	The first sound in <u>nod</u> and the last in <u>tan</u>
* /ŋ/	The last sound in <u>wrong</u>
* /l/	The first sound in <u>lot</u> and the last in <u>call</u>
* /r/	The first sound in <u>rope</u>

\* Voiced consonants, others are unvoiced

- \* /y/ The first sound in you
- \* /w/ The first sound in win
- /h/ The first sound in hit

### Vowel Phonemes and Diphthongs

- /i/ The vowel sound in hit /hit/
- /e/ The vowel sound in bet /bet/
- /æ/ The vowel sound in hat /hæt/
- /ɔ/ The vowel sound in cut /kʌt/
- /ɑ/ The vowel sound in cat /kæt/, rock /ræk/,  
and clock /klɒk/
- /u/ The vowel sound in foot /fʊt/
- /ɒ/ The vowel sound in law /lɔ/, caught /kɔt/,  
and log /lɒg/

### Diphthongs

In addition to the seven simple vowel phonemes, there are also a number of complex vowels called diphthongs. A diphthong is a sound made by pronouncing any of the simple vowels with a gliding sound. The gliding sound is usually represented by /y/ or /w/.

Here is a chart to help you identify and pronounce the various diphthongs of English. Some of the diphthongs are also called long vowels.

- /iy/ The diphthong in lean /liyn/, yield /yiild/,  
seen /siyn/, and me /miy/
- /ey/ The diphthong in rain /reyn/, say /sey/, lame  
/leym/, and break /breyk/
- /ay/ The diphthong in tie /tay/, buy /bay/, cry  
/kray/, and mile /mayl/
- /ɔy/ The diphthong in joint /jɔynt/, joy /jɔy/,  
coin /kɔyn/, and toil /tɔyl/
- /uw/ The diphthong in rule /ruwl/, crude /kruwd/,  
and blue /bluw/
- /ow/ The diphthong in slow /slow/, no /now/, groan  
/groun/, and owe /ow/
- /aw/ The diphthong in house /hawa/, cow /kaw/, out  
/awt/, and sound /sawnd/

### Pronunciation and the Dictionary

In an ideal alphabet you would expect that each symbol would represent one distinct and significant sound. But the twenty-six letters of the alphabet, used either singly or in combinations, like gh and ea, have to symbolize in English at least twenty-four consonant phonemes, seven vowels, and seven diphthongs. Consequently one letter often symbolizes more than one sound. Also, one sound is often symbolized by many different letters. Because the letters of the alphabet are imperfect symbols of English phonemes, it is sometimes difficult to know

how a word is pronounced just by looking at it. As a result, many people go to a dictionary to find out how to pronounce unfamiliar words. As a guide to pronunciation, the dictionary can indicate how to pronounce a word. It can also indicate the force with which a syllable should be spoken. A syllable is a vocal unit pronounced as one sound.

Various dictionaries have different pronunciation symbols to represent certain sounds. In most dictionaries a pronunciation key is found at the bottom of each, or of every other page.

### Acceptable Pronunciation

The dictionary is a guide for determining acceptable pronunciations of words. It is not the purpose of dictionary makers to say that you must pronounce a word in a certain way or ways. Makers of dictionaries merely record how words are commonly pronounced by educated speakers today. Because some pronunciations are more common than others, many dictionaries show the most common pronunciations as the first entry. However, in your part of the United States, the second dictionary pronunciation of a word may be more widely used than the first dictionary pronunciation. If so, that is the pronunciation for you to use.

### Sample Lesson

Bronx Community College  
City University of New York

Department of Special Ed. Services C  
Reading and Study Skills Laboratory  
E. L. Fryburg, Ph. D.

### Morphemes as Word Parts

Some words consist of a single morpheme, like the word kind, while others have several morphemes, like unkindly. Usually, when a word has two or more morphemes, only one of these will carry the principal meaning. This morpheme is called the base of a word. The other morphemes, attached before or after the base, are called affixes. For example, un- and -ly are affixes.

In the spaces provided, write the bases of the following words:

- |                    |                       |
|--------------------|-----------------------|
| 1. sleepless _____ | 11. disappear _____   |
| 2. prejudice _____ | 12. aloud _____       |
| 3. bloody _____    | 13. healthy _____     |
| 4. admit _____     | 14. stationary _____  |
| 5. happy _____     | 15. unfeelingly _____ |
| 6. data _____      | 16. recovered _____   |
| 7. denying _____   | 17. credible _____    |
| 8. bicycle _____   | 18. fancy _____       |
| 9. concede _____   | 19. exclude _____     |
| 10. visible _____  | 20. hewn _____        |

Affixes are always bound morphemes--that is, they cannot stand alone. Bases, however, may be either bound or free. Many of the bound bases in English are borrowed from Latin and Greek. By learning to identify these bases, one will have clues to the meanings of thousands of words. For example, by knowing that the base dict came from the Latin dicere meaning "to say," one can get a fairly accurate idea of the meanings of the words predict, diction, dictation, and dictum. The following list illustrates a few of the Latin and Greek bases used to form English words:

alter	(change)	alternate
hydro	(water)	hydraulic
micro	(small)	microscope
term	(end)	terminal

- |                |                |
|----------------|----------------|
| 1. bio _____   | 6. psych _____ |
| 2. magn _____  | 7. tele _____  |
| 3. mult _____  | 8. auto _____  |
| 4. photo _____ | 9. phil _____  |
| 5. geo _____   | 10. phob _____ |

One must be careful, however, on using Greek and Latin bases as clues to word meaning. The sum of morphemes in a word may not add up to the current English meaning. Or, these morphemes may express the meaning in a highly figurative way. One may know that con- is an affix meaning "with" and cord a base meaning "heart." But to say that the word concord means "with heart" instead of "agreement" is totally misleading. Often additional clues to meaning are needed, and they will be found in the surrounding words, or context.

One must be careful, also, to recognize true morphemes. The affix-pre in the word predict is a true morpheme meaning "before." But the first three letters in the word pretzel do not form a morpheme. The word pretzel has only one morpheme.

## Sample Lesson

### An Introduction to Sentence Meaning

Although individual words have meaning, words must be arranged in a particular order in order to carry a message. English depends heavily on word order. The position of words in a sentence provides clues to the meaning of the sentence.

#### Exercise 1

Arrange the following words into an acceptable English sentence.

1. I to but wanted I wouldn't
2. The at night dinner last Mr. Jones an hour for spoke
3. The baseball pastime of is America national
4. Are blue our colors and school yellow
5. Dashed squirrel a up tree my

A string of words is a sentence when the words are meaningfully arranged. Each word in it fits, or patterns, in a particular way to communicate meaning.

Here is a simple sentence.

Example: She fell.

She is the subject (doer) of the sentence.

Fell is the verb (action) of the sentence.

Here is the same simple sentence, but we are told when she fell.

Example: Last evening, while Jane was on her way home from the library, she stumbled on the street and she fell.

#### Core Words

Long sentences are likely to contain many details. You will grasp the meaning much faster if you recognize which parts are only details. Some of them, might be details about how, when where or why.

The two main core words are the subject which tells what person or thing performs the action, and the verb which generally tells what the person or thing is doing or did.

Example: The boy ran down the street.

Boy is the subject and ran is the verb.

#### Exercise 2:

Sentences in which students indicated subject and verb.

## Sample Lesson

### Exercises in Sentence Meaning

#### Pattern 1: Indirect object/direct object sequence construction

Choose the one sentence that has the same meaning as the underlined sentence and circle the letter in front of it.

1. She bought her daughter a dress.
  - a. Her daughter bought a dress.
  - b. She bought a dress for herself.
  - c. She bought a dress for her daughter.
  - d. Her daughter bought a dress for her.

#### Pattern 2: Relative clause modifies subject

The underlined sentences can be made into smaller sentences. For each group of sentences choose two sentences that say something true about the underlined sentence. Circle the letters in front of the sentence you choose.

1. The man who taught Mary to skate was awarded a skating medal.
  - a. The man had taught Mary to skate.
  - b. Mary was awarded a skating medal.
  - c. Mary had taught the man to skate.
  - d. The man was awarded a skating medal.
  - e. The man had Mary awarded a skating medal.

#### Pattern 3: Passive voice in complex sentence where relative clause contains passive

For each group of sentences choose two sentences that say something true about the underlined sentence. Circle the letters in front of the sentences you choose.

1. The girl who had been picking flowers for her mother won an award at the flower show.
  - a. The mother won an award at the flower show.
  - b. The girl had been picking flowers.
  - c. The girl won an award for her mother.
  - d. The girl won an award.
  - e. The mother had been picking flowers.

## Appendix B

Bronx Community College  
of the City University of New York

Dept. of Special Educational Services  
READING & STUDY SKILLS LAB.

### HOMEWORK ASSIGNMENTS RDL-02

Texts: Pauk, Walter. How to Study in College. Boston: Houghton Mifflin Company, 1962.

Sherbourne, Julia. Toward Reading Comprehension, Form 1. Boston: D.C. Heath Company, 1958.

Brown, James I. Programmed Vocabulary, Chicago, Ill.: Lyons and Carnahan, Inc., 1965.

#### To the student:

The homework assignments which follow have been selected because they are practical. Each assignment will give you the information, technique and practice which may be applied IMMEDIATELY to the courses in which you are enrolled. You will derive the greatest benefit from your work, if the assignments are prepared before the class. This will allow you the opportunity to share in class discussion, and to ask the instructor to clarify any part of the assignment which may have caused difficulty.

#### General Instructions:

1. All homework to be placed in your Lab work folder as completed. DO NOT ACCUMULATE AT HOME.
2. Sherbourne: This is a workbook with perforated pages. Write answers in the book, correct from key in back, tear out and put in Lab folder.
3. Brown: Write answers on separate pages and turn in. We do not want you to tear up this bound book.

#### Efficient Study

##### Assignment No. 1: How to Plan Your Work.

- a. Read Pauk, "Scheduling Your Time," Chap. 2, pp. 4-13 and "Concentration," Chap. 9, pp. 66-71.
- b. Make a study schedule for yourself, based upon your program and your needs, similar to the sample on p. 10. Get the form from your instructor. As you prepare your study schedule, keep in mind the principles of massed and distributed study which are discussed on p. 7.
- c. Analyze the reading skills you have and those which you would like to perfect. On an 8 X 10 sheet of paper, list the reading skills which you would like to improve.

#### The Mechanics of Reading

##### Assignment No. 2: Using the Dictionary (MAKE SURE YOU HAVE THE DICTIONARY HOMEWORK SHEETS).

- a. Learn and list the resources of your dictionary, examining the front and back sections.  
Do Sherbourne, ex. 5, p. 56.
- b. DO DICTIONARY HOMEWORK SHEET, p. 1.
- c. Applying the phonetic symbols of the pronunciation key. Do Sherbourne, Ex. 3, p. 55. DO DICTIONARY SHEETS., p. 2, p. 3, p. 4.
- d. Do Sherbourne, ex. 2, p. 54, Use of Guide Words in Your Dictionary.

## The Mechanics of Reading

### Assignment No. 3: A Review of Phoneme-Grapheme Correspondence (Sound-Letter Relationship)

- a. Read and study Sherbourne, p. 219, Sections I, II, III, IV, V, VI. Say the words to yourself, as you study. Do Phonics Drill One p. 222.
- b. Read and study Sherbourne, p. 220, Section VIII. Say the words. Do Phonics Drill FOUR, p. 222
- c. Read and study Sherbourne, p. 220, Section X. Say the words. Do Phonics Drill EIGHT and NINE, p. 223.

### Assignment No. 4: More about Phoneme-Grapheme Relationship

- a. Read and study Sherbourne, p. 220, Section XI. Say the words. Drill TEN, p. 223.
- b. Syllabication  
Read and study Sherbourne, Section XXII, pp. 221-222.  
Do Drills SEVENTEEN through TWENTY-THREE, pp. 224-225. Note and Follow directions given. When you have completed these and checked your work, try Drills TWENTY-FOUR and TWENTY-FIVE, if you have time.
- c. DO DICTIONARY HOMEWORK SHEET p. 5.

### Assignment No. 5: The Dictionary Entry

- a. Definitions---DICTIONARY HOMEWORK SHEET, p. 6.
- b. Synonyms---DICTIONARY HOMEWORK SHEET, p. 7.
- c. Spelling---DICTIONARY HOMEWORK SHEET, p. 8.
- d. Plurals of Words---DICTIONARY HOMEWORK SHEET, p. 9.
- e. Textbook Words---DICTIONARY HOMEWORK SHEET, p. 10.

### Assignment No. 6: Expanding Your Vocabulary

- a. Do Vocabulary Quiz, Pauk, p. 59.
- b. Read Pauk, "The Importance of Vocabulary," Chapter 8, pp. 57-65.
- c. Read Brown, Preface, (Use an index card), pp. VII-XI.
- d. Learn "The Fourteen Magic Words" on p. X in Brown.
- e. Do Brown, Units 1-4, pp. 23-50. Review p. 32.
- f. Begin your vocabulary notebook.

### Assignment No. 7: More About Vocabulary

- a. Read and study Sherbourne, "How to Increase Your Vocabulary," pp. 44-52.
- b. Do Sherbourne, Ex. 1, pp. 53-54, Interesting Origins of Ten Words.
- c. Do Brown, Unit 5, pp. 51-54.
- d. Review exercise, p. 55 in Brown, and check word lists, p. 56.

## The Library

### Assignment No. 8: Using the Library

- a. Read "Bronx Community College Library Information."
- b. Library lecture.
  1. Card catalog
  2. Arrangement of the library
  3. Reader's Guide to Periodical Literature and other periodical indexes.
  4. Other references works.
- c. Practice questions to be answered with guidance of librarians.
- d. Do Brown, Units 6-7, pp. 57-65.

### Assignment No. 9: Using the Resources of the Library

- a. Select a particular topic. Prepare a bibliography covering that topic,



Assignment No. 9 (Con't)

Prepare a bibliography covering that topic, utilizing at least ten books found in the card catalog and ten periodicals obtained from Reader's Guide to Periodical Literature or other periodical indexes. Use proper bibliographic form. Gottesman's Stylebook, pp. 17-19 should be utilized as a guide.

(If you have any problems with this assignment, please confer with either of the following librarians: Prof. Edwin Terry; Prof. Jean Kolliner).

- b. Do Brown, Units 8-9, pp. 67-74.

Comprehension

Assignment No. 10: Sentence Meaning

- a. Read and study Sherbourne, pp. 215-216.  
b. Do Sherbourne, Exercises 1, 3, 4, p. 217.  
Do Sherbourne, Exercises 5, 7, 8, 9, p. 218.  
c. Do Brown, Units 10-11, pp. 75-84. Omit p. 79.

Assignment No. 11: Figurative Language

- a. Refer to instructor for assignment.  
b. Do Brown, Units 12-13, pp. 85-93.

Assignment No. 12: Using the Context

- a. Refer to instructor for assignment. Do mimeograph sheet.  
"Exercises in getting meaning from context".  
b. Do Brown, Unit 14, pp. 95-99.

How to Use the Author's Organization in Reading Comprehension

Assignment No. 13: The Organization of Reading Material.

- a. Read Pauk, "A Sense of Order," Chapter 3, pp. 14-19 and p. 35-37.  
b. Apply these analytical techniques to your readings in other subjects.  
c. Do Brown, Unit 15, pp. 101-105.

Assignment No. 14: The Topic Idea

- a. Read and study Sherbourne, "Organizational Aids," Part I, pp. 75-76.  
b. Read and study Sherbourne, "How to Find the Topic Idea of a paragraph," Part 2, pp. 76-80.  
c. Locate the topic ideas in Sherbourne, p. 80, exs. 1,2,3.  
p. 81, exs. 5,6,& 7  
p. 82, exs. 8,11  
p. 83, exs. 12,13,14, & 15  
d. Do Brown, Units 16-17 pp. 1-9-120.

Assignment No. 15: More about the Topic Idea

- a. Analyze and identify the topic ideas in the following paragraph.  
Do Sherbourne, p. 99, ex. 7.  
p. 103, ex. 12.  
p. 104, ex. 14.  
p. 105, ex. 15.  
b. Do Brown, Units 18-19, pp. 121-131

Assignment No. 16: Outlining---The Picture Organization

- a. Study Sherbourne, "How to Use Guide Words," Part 4, pp. 107-110.  
b. Make outlines for Sherbourne, Ex. 1. pp. 110-112, exs. 1,4,6, & 8.  
c. Outline the longer selections in Sherbourne, Ex. 2, p. 113  
Ex. 3, p. 114  
Ex. 6, p. 116  
d. Do Brown, Units 20, pp. 113-137.  
e. Do Brown, Review Exercise IV, pp. 139-140.

### Study Skills

#### Assignment No. 17: How to Study a Textbook

- a. Read Pauk, "How to Read a Textbook," Chap. 6, pp. 39-51.
- b. Read Pauk, "Taking Notes on Textbook and Library Readings," Chap. 7, p. 52-56.
- c. Apply the OK4R textbook reading technique and the notetaking techniques to all of your textbook assignments.
- d. Do Brown, Units 21-22 pp. 149-159.

#### Assignment No. 18: Studying Mathematics and Science

- a. In Pauk, read "Hints on Studying Mathematics," Chap. 15.  
"Approaching the Natural Science," Chap. 16.
- b. Apply the study techniques suggested.
- c. Do Brown, Units 23-24, pp. 161-168.

#### Assignment No. 19: Taking Notes as You Listen

- a. Read Pauk, "In the Classroom: Listening and Taking Notes," Chapter 4, pp. 20-30, Study the three samples of students' notes.
- b. Take notes of a lecture. Compare your notes with the model.
- c. Do Brown, Units 25, pp. 169-172.
- d. Do Brown, Review Exercise V, pp. 173-174.

#### Assignment No. 20: Examination and Remembering

- a. Read Pauk, "Remembering What You Learn," Chap. 10, pp. 72-76. Chap. 11, pp. 77-87.
- b. List 5 techniques suggested by Pauk for taking examination and note the type of exam to which each of these applies. Put a copy of this list in your work folder.
- c. Do Brown, Units 26-27, pp. 175-184.

### How To Evaluate What You Read

#### Assignment No. 21: Inferences

- a. Refer to instructor for assignment.
- b. Do Brown, Units 28-29 pp. 185-193.

#### Assignment No. 22: The Author's Presentation of Proof

- a. Read and study the following standards of evaluation in Sherbourne, pp. 117-118.
  - (1) Use of One Example as Proof.
  - (2) A One-Sided Presentation of Details
  - (3) The Application of a Principle
  - (4) Misleading Comparisons
- b. Read and identify the type of reasoning in Sherbourne, Exs. 4 & 5, p. 126 Sherbourne, Exs. 9 & 10, p. 129, Exs. 18, p. 134.
- c. Do Brown, Unit 30, pp. 195-198, and omit 31, pp. 201-204.
- d. Do Brown Review Exercise VI, pp. 199-200.

#### Assignment No. 23:

- a. Read and study Sherbourne, pp. 119-120.
  - (1) Evaluate anecdote to prove a point
  - (2) Evaluation of quotations
  - (3) The methods of repetition
  - (4) Out of date materials
- b. Read and identify the type of reasoning in Sherbourne, ex. 3, p. 125.
- c. Answer the questions in these exercises: Sherbourne, Ex. 11, p. 130.
- d. Do Brown, Units 32-33, pp. 205-215.

**Assignment No. 24: More About Evaluating What You Read**

- a. Read and study Sherbourne, pp. 121-123.
  - (1) Faculty cause to effect reasoning.
  - (2) Bias in the author's view.
  - (3) Diction and connotation.
  - (4) Figurative language, satire.
- b. Read and identify the type of reasoning in Sherbourne, Ex. 6, p. 127, Ex. 8, p. 128, Ex. 15, p. 133, Ex. 17, p. 134.
- c. Answer the question in these exercises.
- d. Do Brown, Unit 34, pp. 217-220.
- e. Do Brown, Review Exercises VII pp. 221-222.

**Assignment No. 25: Writing a Term Paper**

- a. Read Pauk, "Reading Efficiently," Chapter 5, pp. 31-34.
- b. Read Sherbourne, pp. 21-22.
- c. Do Sherbourne, Ex. 8, p. 26.
- d. Do Sherbourne, Ex. 9, p. 26-27
- e. Do Sherbourne, Ex. 11, p. 27.
- f. Do Brown, pp. 141-142. **READ INSTRUCTIONS CAREFULLY!**

**Apply What You Have Learned And Practiced**

**THIS IS IMPORTANT**

Your rate of reading should vary according to the difficulty of the material, and your purpose in reading it. Speed means little unless accompanied by comprehension.

Reading too slowly, word-by-word makes it difficult to grasp ideas. Reading too quickly often leads to overlooking important details.

DO NOT read everything at ONE plodding rate or ONE too-quick, careless rate. VARY your reading speeds according to the difficulty of the material---spending more time on complex or technical or highly factual or scientific material and less time on easier material.

**Assignment No. 27: How to Time Your Reading**

- a. Read Sherbourne, p. 215 "How to Read and Follow Directions" and become familiar with "How to Time and Exercise." Reading rates are usually given in WPM (words per minute).
- b. Read the following selections from Sherbourne, Chapter 7.
  - (1) Exercise 1, p. 181.
  - (2) Exercise 2, p. 184.
- c. Get a WPM score for each selection and a comprehension score. To help you compute the WPM reading rate score, the word count and the formula are given at the end of each selection.
- d. Do Brown, pp. 143-145.

Applying Reading Skills to Writing

Assignment No. 28: The Essay - General

- a. Refer to instructor for assignment.
- b. Do Brown, pp. 223-225.

Assignment No. 29: Writing an Essay for an Exam.

- a. Refer to instructor for assignment.
- b. Do Brown, pp. 226-228.

Assignment No. 30:

- a. Do Brown, p. X. Re-read the list of 14 "magic" words.  
Look up each one in your dictionary and write its meaning.
- b. MAKE SURE ALL HOMEWORKS FOR THE TERM ARE PLACED IN YOUR LAB WORK FOLDER.

AS:sg

Bronx Community College  
The City University of New York  
Spring, 1972

Department of Special Ed. Services  
Reading and Study Skills Laboratory  
E. L. Fryburg, Ph.D.

Course Texts: Brown, James I. Programmed Vocabulary. Chicago, Ill.: Lyons and Carnahan, Inc., 1965.  
Pauk, Walter. How to Study in College. Boston: Houghton Mifflin Company, 1962.  
Sherbourne, Julia. Toward Reading Comprehension. Form 1. Boston: D.C. Heath Company, 1958.

Written Assignment: Due: May 1, 1972 or May 2, 1972

Instruction will be given in the reading and research skills necessary for the writing of a term paper. A guide to the format generally used in college term paper writing will be distributed.

The student will select a topic of interest, and employing the skills which have been taught, will submit a short term paper. Since this is a skill necessary for college work, this assignment will present the opportunity for guidance in the development of the theme, the reference sources and the reading techniques necessary, leading to the writing and presentation of the term paper.

Examinations: There will be a mid-term and a final class examination. These examinations will be based on college reading techniques which have been taught during class lectures and practice sessions.

There will be short quizzes; at announced times, of the vocabulary assigned.

There will be a reading test at the end of the course of a parallel form of the placement reading test.

Class Organization: Time in class is divided between group lessons and individualized instruction.

Lectures have been planned which give directed instruction in skills designed to improve reading ability.

There are generally forty-five instructional hours each semester. A series of twenty-eight hourly lectures has been planned. The class time remaining will be used for individually planned work, a class visit to the library, and class lessons to reinforce or reteach skills which may not have been mastered. Lectures and classwork exercises for learning skills utilize materials prepared by the instructor, or selected from published materials by the instructor to meet the reading needs of college students.

Homework assignments give practice in the skills presented during the class lectures and applied exercises. The planned series of class lectures follows:

1. What is reading?
2. Reading and Language
3. The History of the English Language---an Introduction to the Dictionary

4. Reading the Dictionary Entry
5. A Review of the Rules of Syllabication
6. The Morpheme---a Unit of Meaning
7. Instruction in Individualized Assignments
  - a. Using the SRA Reading Laboratory
  - b. Using the RFU Reading Laboratory
8. The Use of the Library
9. The Order of Words in Sentences
10. Figurative Language
11. How to Use the Context to Gain Meaning
12. The Organization of Reading Material
13. The Topic Sentence
14. More About the Topic Sentence
15. Outlining
16. Practice in Outlining While Listening
17. How to Study a Textbook
18. Applying Textbook Reading Skills to Bronx Community College textbooks
19. Studying Mathematics and Science
20. Taking Notes as You Listen
21. Examinations and Remembering
22. Inferences
23. The Author's Presentation of Proof
24. More about Evaluating What you Read
25. Writing a Term Paper
26. Building Reading Speed
27. The Essay
28. Writing an Essay for an Examination

#### Classroom Procedures:

Each student maintains a folder in which he keeps his completed assignments (with comments from the instructor), a record of completed coursework, and a record of personal assignments from the instructor which are based upon the individual student's needs. An analysis of the students' homework indicates to the instructor the skills which have been mastered, the skills which must be retaught or reinforced to the group as a whole, or retaught and reinforced to individual students.

A personal conference is held with the student in which his reading tests and other diagnostic data are discussed. The instructor and the student jointly set the goals for the student's personal growth in reading for the semester.

BRONX COMMUNITY COLLEGE  
The City University of New York

DEPARTMENT OF SPECIAL ED. SERVICES  
READING AND STUDY SKILLS LAB.

STUDENT \_\_\_\_\_ SECTION \_\_\_\_\_ SEMESTER \_\_\_\_\_

RECORD OF COMPLETED COURSEWORK

<u>Homework Assignment</u>	<u>Date Completed</u>	<u>SRA Power Builder</u>	<u>Date Completed</u>	<u>SRA RFU</u>	<u>Date Completed</u>
1	_____	_____	_____	_____	_____
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<u>Listen and Read Study Skill Tape</u>	<u>Date Completed</u>	<u>Special Topic Areas</u>	<u>Date Completed</u>
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Bronx Community College  
City University of New York

Department of Special Ed. Services  
READING & STUDY SKILLS LABORATORY  
E.L. Fryburg

STUDENT \_\_\_\_\_ SECTION \_\_\_\_\_ SEMESTER \_\_\_\_\_

PERSONAL STUDY PROGRAM

SRA Power Builder

Assignment

Date

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SRA Reading for Understanding

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Listen and Read Skill Tapes

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Individual Assignments

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Appendix C

Bronx Community College  
City University of New York

Department of Special Ed. Services  
READING AND STUDY SKILLS LABORATORY

Student Profile

Name \_\_\_\_\_ Major \_\_\_\_\_ Status \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Student No. \_\_\_\_\_ RDL 02 \_\_\_\_\_ Semester \_\_\_\_\_

H.S. Academic Standing

English \_\_\_\_\_  
History \_\_\_\_\_  
Mathematics \_\_\_\_\_

Reading Courses

Elementary school \_\_\_\_\_  
High School \_\_\_\_\_  
Tutor \_\_\_\_\_

I. N.D. TEST				Date	Form	N.D. TEST				Date	Form
<u>Ratio</u>	<u>R.Score</u>	<u>%ile</u>	<u>Gr.Lev.</u>			<u>Ratio</u>	<u>R.Score</u>	<u>%ile</u>	<u>Gr.Lev.</u>		
1 Vocab	_____	_____	_____	_____	_____	1 vocab	_____	_____	_____	_____	_____
2 Comp	_____	_____	_____	_____	_____	2.Comp	_____	_____	_____	_____	_____
3 Total	_____	_____	_____	_____	_____	3 Total	_____	_____	_____	_____	_____
4 Rate	_____	_____	_____	_____	_____	4 Rate	_____	_____	_____	_____	_____
5 Gr.Lev	_____	_____	_____	_____	_____	5 Gr.Lev	_____	_____	_____	_____	_____

II. A Test of Sentence Meaning

Total Correct

Total Correct Per Structure

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Bronx Community College  
The City University of New York

Special Educational Services  
READING AND STUDY SKILLS LABORATORY

**STUDENT INFORMATION**

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

I.D. # \_\_\_\_\_

1. What other courses are you taking this semester? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. What particular study problems, if any, do you feel you have  
(based on past experience). \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

3. What particular reading problems, if any, do you feel you have?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

READING HABITS QUESTIONNAIRE

NAME \_\_\_\_\_ SECTION \_\_\_\_\_

1. What is your native language? \_\_\_\_\_  
How long have you spoken English? \_\_\_\_\_  
Is English spoken at home? \_\_\_\_\_
2. Do you like to read? \_\_\_\_\_
3. Would you rather read?  
a. stories \_\_\_\_\_ b. biographies \_\_\_\_\_  
c. how to make and do things \_\_\_\_\_ d. science \_\_\_\_\_  
e. history \_\_\_\_\_ f. current events \_\_\_\_\_
4. How many books other than texts have you read in the past year? \_\_\_\_\_
5. What magazines do you read regularly? \_\_\_\_\_
6. What newspapers do you read regularly? \_\_\_\_\_
7. Why do you think some assignments are dull and boring? \_\_\_\_\_
8. What are your favorite reading interests? Comics \_\_\_\_\_ Detective \_\_\_\_\_  
Adventure \_\_\_\_\_ Science Fiction \_\_\_\_\_ Sports \_\_\_\_\_ Other \_\_\_\_\_
9. Why do you want to read better? \_\_\_\_\_
10. What do you think are some reasons you are not a better reader? \_\_\_\_\_  
\_\_\_\_\_
11. Do you make a study plan? \_\_\_\_\_
12. Do you have a library card? \_\_\_\_\_
13. How often do you take books from the library? \_\_\_\_\_  
Kind of books? \_\_\_\_\_
14. What is your most liked subject in school? \_\_\_\_\_
15. What is your most disliked subject in school? \_\_\_\_\_
16. Do you have a quiet place to study? \_\_\_\_\_
17. What are your hobbies? \_\_\_\_\_
18. Do you wear eyeglasses? \_\_\_\_\_ How long since your eyesight was  
checked? \_\_\_\_\_
19. Do your eyes get tired when reading two or more hours? \_\_\_\_\_
20. Have you any hearing defect? \_\_\_\_\_ If so, please describe condition.  
\_\_\_\_\_
21. Please use back of this form for more details about any of the above.

COMPLETION QUESTIONNAIRE

NAME \_\_\_\_\_ DATE \_\_\_\_\_

**DIRECTIONS:** Complete the following sentences to express how you really feel. There are no right or wrong answers. Put down what first comes into your mind and work as quickly as you can. Complete all the sentences and do them in order.

1. Today I feel \_\_\_\_\_
2. When I have to read, I \_\_\_\_\_
3. I get angry when \_\_\_\_\_
4. When I am older \_\_\_\_\_
5. My idea of a good time \_\_\_\_\_
6. I wish my parents knew \_\_\_\_\_
7. I believe that I have the ability to \_\_\_\_\_
8. I can't understand why \_\_\_\_\_
9. I feel bad when \_\_\_\_\_
10. In school, teachers \_\_\_\_\_
11. I think that most mothers \_\_\_\_\_
12. Going to college \_\_\_\_\_
13. I like working with people who \_\_\_\_\_
14. People think I \_\_\_\_\_
15. I like to read about \_\_\_\_\_
16. On weekends, I \_\_\_\_\_
17. I don't know how \_\_\_\_\_
18. To me, homework \_\_\_\_\_
19. I hope I'll never \_\_\_\_\_
20. I wish people wouldn't \_\_\_\_\_
21. If I were young again \_\_\_\_\_
22. I'M afraid \_\_\_\_\_
23. I feel that a real friend \_\_\_\_\_
24. I would like to forget the time I \_\_\_\_\_

25. I am at my best when \_\_\_\_\_
26. Compared with most families, mine \_\_\_\_\_
27. In taking notes, I \_\_\_\_\_
28. When I read math \_\_\_\_\_
29. The future looks \_\_\_\_\_
30. I feel proud when \_\_\_\_\_
31. I feel that my father \_\_\_\_\_
32. When I see graphs and tables in a textbook, I \_\_\_\_\_
33. I would like to be \_\_\_\_\_
34. For me, studying \_\_\_\_\_
35. I often worry about \_\_\_\_\_
36. I always wanted to \_\_\_\_\_
37. When I see a man and woman together \_\_\_\_\_
38. When the odds are against me \_\_\_\_\_
39. I wish someone would help me \_\_\_\_\_
40. When reading a long assignment, I \_\_\_\_\_

Name \_\_\_\_\_ Examiner \_\_\_\_\_  
Date of Test \_\_\_\_\_ month day year \_\_\_\_\_  
Age \_\_\_\_\_ years months \_\_\_\_\_  
Boy Girl School Grade  
(circle one)

**A TEST OF SENTENCE MEANING**  
**A Diagnostic Test**  
**of Syntactic Clues to Meaning in Reading**

Revised Edition  
© 1968 by Albert D. Marcus

## READING TEST Part I

This is a silent reading test to find out how well you understand the meaning of different kinds of sentences.

Part I of the test contains two kinds of exercises. There are different directions for each kind of exercise. Read the directions before you begin the exercises. When you work on each exercise, be sure that you read all possible answers before you choose the correct answer or answers.

### SAMPLE EXERCISES

#### Directions for Exercise 1

Choose the one sentence that has the same meaning as the underlined sentence, and circle the letter in front of it.

1. The man gave the boy a puppy.
  - a. The man gave away the boy's puppy.
  - b. The man gave a puppy to the boy.
  - c. The boy gave a puppy to the man.
  - d. The man gave a puppy away for the boy.

Letter b is the correct answer because this sentence has the same meaning as the underlined sentence.

#### Directions for Exercise 2

The underlined sentence can be made into smaller sentences. Choose two sentences that say something true about the underlined sentence. Circle the letters in front of the two sentences you choose.

2. Mary saw the man who ate the pie.
  - a. The man saw Mary eat the pie.
  - b. The man ate the pie.
  - c. The man saw Mary.
  - d. Mary ate the pie.
  - e. Mary saw the man.

Letters b and e are the correct answers because these two sentences say something true about the underlined sentence. The other sentences do not tell something true about the underlined sentence.

This is not a timed test. If you have not finished when it is time to stop, you will be able to finish it at another time. Some of the exercises may be difficult, but do not spend too much time on any one exercise. Do not skip any exercises. If you are not sure of an answer, choose the answer that you think is the most correct.

**Directions for this page**

Choose the one sentence that has the same meaning as the underlined sentence and circle the letter in front of it.

1. **He brought the woman her son.**
  - a. He brought the woman with her son.
  - b. He brought the woman and her son.
  - c. He brought the woman to her son.
  - d. He brought her son to the woman.
  
2. **The batter hit the man the ball.**
  - a. The batter hit the man with the ball.
  - b. The batter was hit by the man with the ball.
  - c. The batter was hit the ball by the man.
  - d. The batter hit the ball to the man.
  
3. **The salesman found the girl her job.**
  - a. The salesman found the girl and her job.
  - b. The salesman found the job for the girl.
  - c. The girl found the job as a salesman.
  - d. The salesman and the girl found the job.
  
4. **She brought the doctor the children in the morning.**
  - a. In the morning she brought the doctor to the children.
  - b. In the morning she brought the children to the doctor.
  - c. She brought the doctor to the children in the morning.
  - d. In the morning she brought the doctor's children.
  
5. **We mailed him the package.**
  - a. We mailed him and the package.
  - b. We mailed the package to him.
  - c. The package we mailed was his.
  - d. We mailed the package for him.
  
6. **She bought the cat a fish.**
  - a. She bought a fish for the cat.
  - b. She bought the catfish.
  - c. She bought a fish and the cat.
  - d. She bought the cat and a fish.



**Directions**

The underlined sentences can be made into smaller sentences. For each group of sentences choose two sentences that say something true about the underlined sentence. Circle the letters in front of the sentences you choose.

1. The boys who chased the dogs ran around the corner.
  - a. The boys ran around the corner.
  - b. The dogs ran around the corner.
  - c. The dogs chased the boys.
  - d. The boys whom the dogs chased ran around the corner.
  - e. The boys chased the dogs.
  
2. The student whom the teacher corrected erased the board.
  - a. The teacher erased the board.
  - b. The student corrected the teacher.
  - c. The student correctly erased the board.
  - d. The teacher corrected the student.
  - e. The student erased the board.
  
3. The boy to whom she gave the rabbit climbed through the hole in the fence.
  - a. The boy climbed through the hole in the fence.
  - b. The boy gave her the rabbit.
  - c. The rabbit climbed through the hole in the fence.
  - d. She gave the rabbit to the boy.
  - e. She climbed through the hole in the fence.
  
4. The nurses who helped the sick old lady received some fruit and a box of candy.
  - a. The sick old lady received some fruit.
  - b. The nurses received some fruit and a box of candy.
  - c. The nurses helped the sick old lady.
  - d. The sick old lady received a box of candy.
  - e. The nurses helped the sick old lady receive some fruit and a box of candy.
  
5. The girl whom the witness blamed for the accident told the judge her story.
  - a. The girl blamed the witness for the accident.
  - b. The witness blamed the girl for the accident.
  - c. The witness told the judge her story.
  - d. The girl told the judge her story.
  - e. The witness who was blamed for the accident told the judge her story.
  
6. The man from whom she bought the horse chased the deer this morning.
  - a. The horse chased the deer this morning.
  - b. The man chased the deer with the horse this morning.
  - c. She bought the horse this morning.
  - d. The man chased the deer this morning.
  - e. She bought the horse from the man.

7. The men who were attacked by the police ran around the corner.
- The police ran around the corner.
  - The men ran around the corner.
  - The men attacked the police.
  - The police were attacked.
  - The police attacked the men.
8. The women hired the girl who had been sent money by her mother.
- The women were sent money by the girl's mother.
  - The women hired the girl.
  - The women were hired by the girl's mother.
  - The girl's mother had sent her money.
  - The mother had sent the women money.
9. The soldiers who had been seen by the driver ran towards the empty house.
- The driver ran towards the empty house.
  - The soldiers saw the driver.
  - The driver saw the soldiers run towards the empty house.
  - The driver saw the soldiers.
  - The soldiers ran towards the empty house.
10. My sister who was found a job by my uncle got paid once a week.
- My uncle found my sister a job.
  - My uncle got paid once a week.
  - My sister found a job for my uncle.
  - My sister found a job with my uncle.
  - My sister got paid once a week.
11. Bob mailed the coins that had been discovered in France by Tom to New York.
- Bob mailed the coins to New York.
  - Bob discovered the coins.
  - Tom mailed the coins from France to New York.
  - Tom discovered the coins in France.
  - Bob mailed the discovered coins in France.
12. John showed Bob the book that had been given to Henry by Tom.
- John showed Bob the book.
  - Bob gave the book to Henry.
  - Tom gave Henry the book.
  - Henry gave the book to Tom.
  - John showed the book he gave to Henry.

13. John hit the boy who was throwing the rocks.
- The boy was throwing the rocks.
  - The boy who was throwing the rocks hit John.
  - John hit the boy by throwing rocks.
  - John hit the boy.
  - John was throwing the rocks.
14. The policeman captured the robber whom he had seen leave the bank.
- The policeman captured the robber.
  - The robber had seen him leave the bank.
  - The policeman had seen the robber leave the bank.
  - The policeman captured the robber leaving the bank.
  - The policeman was leaving the bank and saw the robber.
15. Tom hit the boy at whom he was throwing the rocks.
- The boy was throwing the rocks.
  - The boy who was throwing the rocks hit Tom.
  - Tom hit the boy.
  - The boy hit Tom.
  - Tom was throwing the rocks.
16. He drove the soldiers who destroyed the enemy to the camp.
- The soldiers destroyed the enemy.
  - He drove the soldiers to the destroyed enemy camp.
  - The soldiers drove to the enemy's camp.
  - He drove the soldiers to the camp.
  - He destroyed the enemy.
17. The dog frightened the child whom the workman was protecting.
- The workman was protecting the dog from the child.
  - The child was frightened by the workman.
  - The dog was protecting the child from the workman.
  - The workman was protecting the child.
  - The dog frightened the child.
18. Bob saved the man for whom he had sold the truck.
- The man saved the truck for Bob.
  - Bob had sold the truck for the man.
  - The man had sold the truck for Bob.
  - Bob saved the man.
  - Bob saved the man from selling the truck.

19. The mother of the girls who were riding in the bus drove to the side entrance of the school.
- The bus drove to the side entrance of the school.
  - The mother drove to the side entrance of the school.
  - The girls were riding with their mother.
  - The girls riding in the bus drove to the side entrance of the school.
  - The girls were riding in the bus.
20. The men called to the boys whom they helped.
- The men called for the boys to help them.
  - The men called the boys for help.
  - The boys helped the men.
  - The men helped the boys.
  - The men called to the boys.
21. The woman sold the pole to the man with whom her son had gone fishing.
- The woman sold the pole to the man.
  - The man had gone fishing with the pole the woman sold him.
  - The woman's son used the pole when he went fishing.
  - Her son had gone fishing with the man.
  - The woman and her son had gone fishing with the man.
22. The uncle of the boys who were swimming in the river drowned in a boat accident yesterday.
- The uncle drowned in a boat accident yesterday.
  - The boys were swimming yesterday.
  - The boys were swimming in the river.
  - The boys drowned in a boat accident in the river.
  - The boys drowned while swimming in the river.
23. The guards yelled at the soldiers whom they heard.
- The soldiers heard the guards.
  - The guards heard the soldiers.
  - The soldiers heard them.
  - The soldiers heard the guards yelling.
  - The guards yelled at the soldiers.
24. The daughter of the man for whom David worked drove to the office in a new sports car.
- David worked for the man.
  - The daughter worked for her father.
  - The man's daughter drove to the office in a new sports car.
  - David drove to the office in a new sports car.
  - David worked in the office.

25. The man from whom she bought the ring threw the small package that was round and shiny into the river.
- The package was round, small, and shiny.
  - The man threw the round, shiny ring into the river.
  - The man bought the ring from her.
  - She bought the ring from the man.
  - She bought the ring and threw the small package into the river.
26. The boys whom the captain chose for the job delivered the letter to the scouts who had discovered the treasure.
- The boys delivered the letter.
  - The captain chose the job and delivered the letter.
  - The captain chose the boys to be scouts.
  - The captain chose the scouts for the job.
  - The scouts discovered the treasure.
27. After lunch the coach who had painted the boat helped the boy whom he paid for his work.
- The coach helped the boy paint the boat.
  - The boy painted the boat for the coach.
  - The coach helped the boy.
  - The boy paid the coach for his work.
  - The coach paid the boy for his work.
28. My cousin John with whom Bill had gone fishing argued with the boat's captain whom he angered.
- The captain angered my cousin John.
  - I had gone fishing with my cousin John.
  - Bill argued with the boat's captain.
  - My cousin John angered the captain.
  - Bill had gone fishing with my cousin John.
29. The man for whom Henry bought the watch gave it to the woman from whom the owner of the building collected the rent.
- The owner of the building collected the rent from the man.
  - Henry bought the watch for the man.
  - Henry bought and gave the watch to the man.
  - The man bought the watch from Henry.
  - The owner of the building collected the rent from the woman.
30. The woman whom Uncle Robert admired handed the gift to the doctor whom she visited.
- The woman visited the doctor.
  - Uncle Robert admired the gift.
  - Uncle Robert admired the woman.
  - Uncle Robert handed the gift to the woman he admired.
  - The doctor visited the woman.

**READING TEST**  
**Part II**

This is a test to find out how well you understand the meaning of different kinds of sentences.

Part II of the test contains two kinds of exercises. There are different directions for each kind of exercise. Read the directions before you begin the exercises. When you work on each exercise, be sure that you read all possible answers before you choose the correct answer or answers.

**SAMPLE EXERCISES**

**Directions for Exercise 1**

The underlined sentence can be made into smaller sentences. Choose two sentences that say something true about the underlined sentence. Circle the letters in front of the two sentences you choose.

1. Mary saw the man who ate the pie.
  - a. The man saw Mary eat the pie.
  - b. The man ate the pie.
  - c. The man saw Mary.
  - d. Mary ate the pie.
  - e. Mary saw the man.

Letters b and e are the correct answers because these two sentences say something true about the underlined sentence. The other sentences do not tell something true about the underlined sentence.

**Directions for Exercise 2**

Three of the four sentences below have the same meaning. Choose the one sentence that has a different meaning and circle the letter in front of it.

2.
  - a. Mother gave the baby the bottle.
  - b. The baby was given the bottle by mother.
  - c. The baby gave mother the bottle.
  - d. The bottle was given to the baby by mother.

Letter c is the correct answer, because sentences a, b, and d all have the same meaning, and sentence c has a different meaning.

This is not a timed test. If you have not finished when it is time to stop, you will be able to finish it at another time. Some of the exercises may be difficult, but do not spend too much time on any one exercise. Do not skip any exercises. If you are not sure of an answer, choose the answer that you think is the most correct.

**Directions**

The underlined sentences can be made into smaller sentences. For each group of sentences choose two sentences that say something true about the underlined sentence. Circle the letters in front of the two sentences you choose.

1. The committee appointed her brother president.
  - a. The president appointed her brother.
  - b. The committee appointed her brother to be president.
  - c. The committee and the president appointed her brother.
  - d. The committee appointed her.
  - e. The committee appointed her brother.
  
2. They elected Paul secretary of the committee.
  - a. They elected Paul.
  - b. The secretary elected Paul for the committee.
  - c. The secretary of the committee elected Paul.
  - d. They elected Paul's secretary to the committee.
  - e. They elected Paul to be secretary.
  
3. They voted Edward the most popular boy.
  - a. They voted for Edward and the most popular boy.
  - b. Edward voted for the most popular boy.
  - c. They voted Edward to be the most popular boy.
  - d. They voted for Edward.
  - e. The most popular boy voted for Edward.
  
4. His aunt considered him a fool.
  - a. His aunt considered him foolish.
  - b. He was a fool.
  - c. His aunt considered him to be foolish.
  - d. He was foolishly considered.
  - e. His aunt foolishly considered him.
  
5. We found it a difficult job for the beginners.
  - a. The job was difficult for the beginners.
  - b. We found the beginners.
  - c. The beginners found a difficult job.
  - d. We found it to be a difficult job for the beginners.
  - e. We found a difficult job for the beginners.
  
6. The girl thought him a success.
  - a. He was a success.
  - b. The girl successfully thought of him.
  - c. The girl thought him successful.
  - d. He was successfully thought of.
  - e. The girl thought that he was a success.

7. He heard the caged bird.

- a. He heard the bird.
- b. He was in the cage.
- c. The bird that heard was in the cage.
- d. In the cage he heard the bird.
- e. The bird was in a cage.

8. He saw the mean looking boy.

- a. He saw the mean boy.
- b. The boy looked mean.
- c. He saw the boy.
- d. The boy looked meanly at him.
- e. He looked meanly at the boy.

9. She went to the woman doctor.

- a. The woman went to her doctor.
- b. She went to the woman's doctor.
- c. She went to the doctor for the woman.
- d. The doctor is a woman.
- e. She went to the doctor.

10. The woman heard the singing man.

- a. The woman heard the man.
- b. The woman's singing was heard by the man.
- c. The man heard the singing.
- d. The man was singing.
- e. The man sang for the woman to hear him.

11. The flowers in the bowls are lovely.

- a. The flowers looked lovely in the bowls.
- b. The flowers are in the bowls.
- c. The flowers are in the lovely bowls.
- d. The flowers and the bowls are lovely.
- e. The flowers are lovely.

12. The old man outside owns a small cat.

- a. The old man owns a small cat.
- b. The old man's cat is outside.
- c. The old man is outside.
- d. The cat that the old man owns is outside.
- e. The old man owns the small cat outside.



13. Jane gave the cooky behind the jar to the boy.
- Jane gave the boy the cooky.
  - The giving of the cooky was behind the jar.
  - Jane was behind the jar.
  - The cooky was behind the jar.
  - The boy was behind the jar.
14. In the morning the doctor drove in his truck to the accident.
- The doctor drove in his truck.
  - The accident was in the morning.
  - The doctor was in the accident.
  - His truck was in the accident.
  - The doctor drove in the morning.
15. He filled a glass from over the sink with milk.
- The glass was filled over the sink.
  - The glass had been over the sink.
  - He filled a glass with milk.
  - The milk was over the sink.
  - The milk and the glass were over the sink.
16. Last night they moved the tree which my brother had planted behind the house that morning.
- My brother had planted the tree behind the house.
  - They moved the tree last night.
  - They moved the tree to behind the house.
  - My brother planted the tree last night.
  - They moved the tree that morning.
17. The governor agreed with state leaders today on a plan for dividing \$430-million in state aid to cities over the next three years.
- The \$430-million state aid was divided among the cities today.
  - The plan divided the cities over the next three years.
  - The state aid was to be over the next three years.
  - The plan divided \$430-million in state aid.
  - Over the next three years the governor will divide the state aid with state leaders.
18. The new building will provide many kinds of services for the inhabitants of a block between West Avenue and Lakeside Drive.
- The new building is between West Avenue and Lakeside Drive.
  - The services are for the inhabitants of a block.
  - There are many kinds of inhabitants on the block.
  - The services are between West Avenue and Lakeside Drive.
  - The block is between West Avenue and Lakeside Drive.

**Directions**

Three of the sentences in each group have the same meaning. Choose the one sentence that has a different meaning, and circle the letter in front of it.

1.
  - a. He gave the candy to the lady.
  - b. He was given the candy by the lady.
  - c. The lady gave him the candy.
  - d. The candy was given him by the lady.
  
2.
  - a. Some flowers were bought by the boy for the girl this morning.
  - b. The boy bought the girl some flowers this morning.
  - c. This morning the girl was bought some flowers by the boy.
  - d. The girl bought some flowers for the boy this morning.
  
3.
  - a. The money was sent to us by them yesterday.
  - b. Yesterday we were sent the money by them.
  - c. We were sending the money with them yesterday.
  - d. Their sending of the money to us occurred yesterday.
  
4.
  - a. I found my brother a job.
  - b. A job was found for me by my brother.
  - c. My brother found a job for me.
  - d. I was found a job by my brother.
  
5.
  - a. Her mother was elected by the president and us.
  - b. We elected her mother president.
  - c. Her mother was elected president by us.
  - d. Her mother was elected to be president by us.
  
6.
  - a. The woman gave the boy the money this morning.
  - b. This morning the money was given the boy by the woman.
  - c. The giving of the money to the boy by the woman occurred this morning.
  - d. The woman was given the money by the boy this morning.

7.
  - a. She agreed with whatever he said.
  - b. With whatever she said he agreed.
  - c. He agreed with whatever she said.
  - d. Whatever she said he agreed with.
  
8.
  - a. It was after they came that she left.
  - b. It was after she left that they came.
  - c. After she left they came.
  - d. They came after she left.
  
9.
  - a. Everyone knows that he is a liar.
  - b. That he is a liar everyone knows.
  - c. He is a liar that everyone knows.
  - d. Everyone knows he is a liar.
  
10.
  - a. They heard the news that the men were safe.
  - b. That the men were safe was the news they heard.
  - c. The news they heard was that the men were safe.
  - d. The news was that they heard that the men were safe.
  
11.
  - a. That he has helped the child is not well known.
  - b. The child he has helped is not well known.
  - c. His helping of the child is not well known.
  - d. It is not well known that he has helped the child.
  
12.
  - a. Who she saw is not known.
  - b. It is who she saw that is not known.
  - c. It is not known who she saw.
  - d. She did not know who she saw.

13. a. Bob's instructions to her were to arrange for the wedding's quick conclusion.  
b. Bob instructed her to quickly conclude the wedding arrangements.  
c. Bob instructed her to quickly conclude the arrangements for the wedding.  
d. Bob's instructions to her were that the wedding arrangements were to be brought to a quick conclusion.
14. a. The senator stated to the reporters that the protection of the people should be the government's main job.  
b. The senator's statement to the reporters was that protecting the people should be the main job of the governed.  
c. The senator's statement to the reporters was that the protection of the people should be the main job of government.  
d. The senator stated to the reporters that protecting the people should be the government's main job.
15. a. Her preparations to perform on stage were concluded because Sam arrived.  
b. Her preparations for her performance on stage were concluded because of Sam's arrival.  
c. She prepared for the conclusion of the performance on stage because of the arrival of Sam.  
d. Because of the arrival of Sam, her preparations to perform on stage were concluded.
16. a. The factory's production of trucks helped to develop the area.  
b. The production of trucks by the factory helped the development of the area.  
c. The factory's production of trucks helped the area's development.  
d. The factory-produced trucks helped the area to develop.
17. a. Mr. Brown's explanation of the mayor's statement satisfied the reporters.  
b. Mr. Brown explained the mayor's satisfactory statement to the reporters.  
c. Mr. Brown explained the statement of the mayor to the reporters' satisfaction.  
d. Mr. Brown explained what the mayor stated to the satisfaction of the reporters.
18. a. He argues that the singers are to improve the requirements for additional effort.  
b. He argues that added effort is required for the singers to improve.  
c. He argues that the singers' improvement requires additional effort.  
d. His argument is that the improvement of the singers requires an addition of effort.

READING TEST  
Part III

This is a test to find out how well you understand the meaning of different kinds of sentences.

Part III of the test contains two kinds of exercises. There are different directions for each kind of exercise. Read the directions before you begin the exercises. When you work on each exercise, be sure that you read all possible answers before you choose the correct answers.

**SAMPLE EXERCISES**

Directions for Exercise 1

Choose the two sentences that combine to give the complete meaning of the underlined sentence.

1. Bob and Don ate the bread and jelly.
  - a. Bob and Don ate the bread.
  - b. Bob ate the bread and jelly.
  - c. Don ate the bread.
  - d. Bob and Don ate the jelly.
  - e. Don ate the jelly.

Letters a and d are the correct answers because only these two sentences give the complete meaning of the underlined sentence.

Directions for Exercise 2

The underlined sentence can be made into smaller sentences. Choose two sentences that say something true about the underlined sentence. Circle the letters in front of the two sentences you choose.

2. Mary saw the man who ate the pie.
  - a. The man saw Mary eat the pie.
  - b. The man ate the pie.
  - c. The man saw Mary.
  - d. Mary ate the pie.
  - e. Mary saw the man.

Letters b and e are the correct answers because these two sentences say something true about the underlined sentence. The other sentences do not tell something true about the underlined sentence.

This is not a timed test. If you have not finished when it is time to stop, you will be able to finish it at another time. Some of the exercises may be difficult, but do not spend too much time on any one exercise. Do not skip any exercises. If you are not sure of an answer, choose the answer that you think is the most correct.

### Directions

Choose the two sentences that combine to give the complete meaning of the underlined sentence.

1. Jane and Tom ran and jumped along the road.
  - a. Jane jumped along the road.
  - b. Jane ran and jumped along the road.
  - c. Tom ran along the road.
  - d. Tom jumped along the road.
  - e. Tom ran and jumped along the road.
  
2. The boy and his uncle fished and hunted all winter and summer.
  - a. The boy fished all winter.
  - b. His uncle fished and hunted all winter and summer.
  - c. The boy hunted all winter and summer.
  - d. The boy hunted and fished all winter and summer.
  - e. His uncle hunted all winter and summer.
  
3. He took his brother, the doctor, and that man.
  - a. He took that man and the doctor.
  - b. He took his brother to the doctor.
  - c. The doctor was a man.
  - d. He took his brother.
  - e. His brother was a doctor.
  
4. She is neither happy nor wealthy.
  - a. She is happy.
  - b. She is not wealthy.
  - c. She is not happy.
  - d. She is wealthy.
  - e. She is both happy and wealthy.
  
5. He is a mayor both popular and respected.
  - a. He is a respected mayor.
  - b. He is popular with the mayor.
  - c. He is respected by the mayor.
  - d. Both he and the mayor are popular and respected.
  - e. He is a popular mayor.
  
6. I bring not peace but a sword.
  - a. I bring peace.
  - b. I bring a sword.
  - c. I bring not only peace but a sword.
  - d. I don't bring a sword.
  - e. I don't bring peace.

**Directions**

The underlined sentences can be made into smaller sentences. For each group of sentences choose two sentences that say something true about the underlined sentence. Circle the letters in front of the two sentences you choose.

1. Anne asked Jane to come at six and Mary at noon.
  - a. Anne asked Jane to come at six and at noon.
  - b. Anne asked Mary at noon.
  - c. Jane was to be at Mary's at noon.
  - d. Anne asked Jane to come at six.
  - e. Anne asked Mary to come at noon.
  
2. The store was painted gray and the house white.
  - a. The store was painted gray and white.
  - b. The house was painted white.
  - c. The store and the house were painted gray.
  - d. The store was painted white and gray.
  - e. The store was painted gray.
  
3. I like raw carrots, not cooked.
  - a. I don't like cooked carrots.
  - b. I like raw and cooked carrots.
  - c. I like raw carrots.
  - d. I like cooked carrots.
  - e. I don't like raw carrots.
  
4. His aunt ate smoked ham, not fresh.
  - a. His aunt didn't eat fresh smoked ham.
  - b. His aunt didn't eat fresh ham.
  - c. His aunt didn't eat smoked ham.
  - d. His aunt ate smoked ham.
  - e. His aunt ate fresh ham.
  
5. He bought not only grapes and apples but also peaches.
  - a. He bought only grapes and apples.
  - b. He didn't buy grapes and apples.
  - c. He bought peaches.
  - d. He bought apples and grapes.
  - e. He didn't buy grapes, apples, or peaches.
  
6. I must buy ice cream and either cake or a pie.
  - a. I must buy ice cream.
  - b. I must buy cake or a pie.
  - c. I must buy ice cream and cake.
  - d. I must buy ice cream and pie.
  - e. I must buy ice cream, cake and a pie.

7. The man who sold papers and who stopped for father left immediately.
- The man left immediately.
  - The man stopped selling papers to father.
  - Father left immediately with the man who sold papers.
  - Father left immediately with the man who stopped.
  - The man stopped for father.
8. The farmer for whom Jim worked and to whom the driver delivered the horses entered the barn to get food.
- The driver delivered the horses to Jim.
  - The horses entered the barn to get food.
  - Jim worked for the driver who delivered the horses.
  - The farmer entered the barn.
  - Jim worked for the farmer.
9. They sent for him after his mother left and before his father had gone.
- They sent for him after his mother and father had gone.
  - Before his mother left they sent for him.
  - They sent for him before his father had gone.
  - After his mother left they sent for him.
  - After his father had gone they sent for him.
10. The Navy told the families of the men aboard the Seabird that the ship was probably lost and that the crew members were thought to be dead.
- The Navy said that the crew members were thought to be dead.
  - The crew members of the Seabird were told by the Navy.
  - The Navy said that the ship was probably lost.
  - The crew members were dead.
  - The ship was lost.
11. The horse jumped because he saw the snake and because the rider frightened him.
- The rider frightened the snake.
  - The horse saw the snake.
  - The snake frightened the rider.
  - The rider frightened the horse.
  - The rider saw the snake.
12. He moved the car after supper was over but before the snow began to fall.
- Before the snow began to fall, he moved the car.
  - After supper was over, he moved the car.
  - He moved the car after the snow began to fall.
  - The snow began to fall before supper was over.
  - He moved the car before supper was over.



13. The birds sang and the chipmunks chirped, all day.
- The birds chirped all day.
  - The chipmunks sang and chirped all day.
  - The birds sang all day.
  - The chipmunks chirped all day.
  - The birds sang and chirped all day.
14. Next to him was a sad-looking old woman, and next to his father was a strange old man.
- A sad-looking old woman was next to his father.
  - A strange old man was next to his father.
  - A sad-looking old woman was next to him.
  - His father was a strange old man.
  - A sad-looking old woman was next to him and his father.
15. Not only is she intelligent, but she is also beautiful.
- She is not intelligent.
  - She is not intelligent, but she is beautiful.
  - She is beautiful.
  - She is only intelligent.
  - She is intelligent.
16. Dan did not get frightened, nor did he refuse to discuss the accident.
- Dan did not get frightened.
  - Dan refused to discuss the accident.
  - He did not discuss the accident.
  - He and Dan did not get frightened.
  - Dan did not refuse to discuss the accident.
17. The boys were tired and hungry, nor were the girls feeling different.
- The boys were tired and hungry not the girls.
  - The girls were not feeling different.
  - The girls were feeling different.
  - Neither the boys nor the girls were tired and hungry.
  - The boys were tired and hungry.
18. Either Mary ate it or Jane took it to the party.
- Either Mary took it to the party or Jane ate it.
  - Either Jane took it to the party or Mary ate it.
  - Either Jane ate it or Mary took it to the party.
  - Either Jane took it or Mary ate it.
  - Mary either ate it or took it to the party for Jane.

19. Mary complained that no one was helping her clear off the tables in the dining room since the group decided that Betty should be relieved of housekeeping duties because she cooked the meals.
- a. The group decided to help Mary clear off the tables.
  - b. Mary cooked the meals.
  - c. Mary was relieved of her housekeeping duties.
  - d. Mary complained that no one helped her clear the dining room tables.
  - e. The group decided to relieve Betty of housekeeping duties.
20. After our boat was all painted, we decided to help David who had painted about half of his old 12-foot rowboat which my father had repaired.
- a. My father had repaired our boat.
  - b. David painted about half of his 12-foot rowboat.
  - c. We finished painting our boat.
  - d. David's old 12-foot rowboat was repaired by my father.
  - e. We helped David paint his old 12-foot rowboat.
21. We elected Sam president and Mary vice-president, because John went away.
- a. John went away because we elected Sam president.
  - b. Because John went away we elected Sam president.
  - c. We elected Mary vice-president because John went away.
  - d. Because we elected Sam president John went away.
  - e. John went away because we elected Mary vice-president.
22. Students among the 35 people arrested early Monday for criminal action when the police broke up a 6-hour meeting in the college president's offices were told that they had until 4 P. M. Thursday to give their reasons for their action if they wanted to return to school.
- a. The police told the 35 people arrested that they had until 4 P. M. Thursday to give their reasons for their action.
  - b. 35 students were arrested for criminal action.
  - c. Students were told that they had until 4 P. M. Thursday to give their reasons for their action.
  - d. When the police broke up a 6-hour meeting, they arrested 35 people.
  - e. The college president's offices were told that they had until 4 P. M. to give their reasons for the action.

23. Almost immediately after the men had begun their discussion of the student action the leader of the parents, who is not a school official, announced that his group would vote for the new rule that had been suggested by the school principals and teachers.
- The school teachers and principals had suggested the new rule.
  - A school official announced that his group would vote for the rule.
  - The leader of the parents suggested the new rule for the group.
  - The men began the discussion of the student action after the parents' leader made his announcement.
  - The leader of the parents announced that his group would vote for the new rule.
24. When the teacher left the room the boys talked and the girls played.
- The girls played when the teacher left the room.
  - When the teacher left the room the boys talked.
  - When the girls played the teacher left the room.
  - The teacher left the room when the boys talked.
  - When the boys talked the teacher left the room.

STOP